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Editorials

HOW BUREAUS GROW IN POLITICS AND BREED BUREAUCRACY

President Roosevelt's move towards the abolition of the devitalizing and unnecessary bureaus at Washington, came not a moment too soon and is proof of the verity of the doctrines for which The Illinois Medical Journal has been crusading for years.

A beautiful illustration set forth specifically of these doctrines which have furnished the editor with his texts of protest, and a revealatory index to the curse against medicine, the public welfare and the economic prosperity of science and of the nation is put down herewith in plain, provable figures and flat fact.

For the publication of these tables and statistics that show the strength and actual venom of the beast of bureaucracy the editor extends thanks to James M. Beck for his permission to quote them from Mr. Beck's book, "Our Wonderland of Bureaucracy."

The two tables printed herewith show how expenditures in the department of agriculture increased from $19,916,228.26 in 1911 to $296,865,944.69 in 1931, and this last staggering sum of expenditure was incurred when the entire country was bent almost to the breaking point in the worst panic of its history, and the problem of the farmer, whom the department of agriculture is supposed to serve was never so criminally tragic since the founding of the nation. The table of the bureau of commerce is equally inexcusable.

Among other verified tables from varying sources that throw light upon this incredibly debauching situation may be noted, first a table from the annual report of the Secretary of the Treasury, and second one published in "The Nation's Business"

Says one authority in pointing to the fact that government has grown many times faster than population, cites figures showing that the cost of operating the Federal government alone

DEPARTMENT OF AGRICULTURE

	1911	1931
General Administration	$ 3,554,778.73	$ 2,631,394.85
Experiment Stations	1,572,455.10	4,733,590.14
Extension Service	2,250,000.00	10,360,578.69
Weather Bureau	1,354,589.92	3,987,460.56
Bureau of Animal Industry	3,728,146.19	15,478,005.79
Bureau of Dairy Industry	.....	771,845.08
Bureau of Plant Industry	1,110,980.43	5,433,500.36
Forest Service	6,157,854.92	25,527,165.08
Bureau of Chemistry and Soils	.....	1,825,004.58
Bureau of Entomology	.....	2,662,348.09
Bureau of Biological Survey	.....	1,956,514.96
Bureau of Public Roads	.....	588,831.03
Bureau of Agricultural Economics	.....	6,188,832.96
Bureau of Home Economics	.....	209,024.57
Plant Quarantine and Control	.....	5,197,003.22
Enforcement of Grain Futures Act	.....	165,765.49
Food, Drug and Insecticide Administration	.....	1,614,666.10
Experiments in Dairying, etc	.....	45,240.36
Farmers' Seed Grain Loans, etc	.....	82,371.35
Co-operative Construction of Rural Post Roads	.....	155,913,895.72
Flood Relief and Porto Rico Hurricane Relief	.....	2,409,043.89
Mt. Vernon Highway	.....	3,392,958.62
Advances and Loans to Farmers	.....	48,742,387.76
Miscellaneous Items	187,422.97	252,962.59
Forest Roads, Trails and Highways	.....	11,715,725.11
Total After Adjustment Between Cash Expenditures and Checks Issued	$19,916,228.26	$296,865,944.69

"Our Wonderland of Bureaucracy," page 74, James M. Beck.

DEPARTMENT OF COMMERCE

	1914	1921	1932
Salaries, Office of the Secretary	$ 151,800.00	$ 196,050.00	$ 467,847.29
Contingent Expenses	35,602.22	50,007.55	340,759.45
Printing and Binding	.....	.....	760,000.00
Rent, District of Columbia	50,000.00	68,500.00	.....
Bureau of Corporations	253,300.00	Became Tariff Commission	
Census Bureau	1,122,820.00	7,550,000.00	6,270,581.75
Bureau of Foreign & Domestic Commerce	174,860.00	916,539.27	5,349,891.01
Steamboat Inspection Service	534,740.00	1,020,394.39	1,395,385.00
Bureau of Navigation	160,510.00	315,160.19	498,120.00
Bureau of Standards	627,533.12	1,306,262.47	3,036,870.00
Coast and Geodetic Survey	1,037,737.80	2,316,960.07	3,078,985.53
Lighthouse Service	5,073,208.49	8,878,808.70	12,162,811.24
Bureau of Fisheries	1,087,190.81	1,288,828.13	2,914,369.57
Miscellaneous	8,556.00	.....	.....
Payment of Claims	8,750.00	1,883.65	1,571.94
Refund of Fees	3,000.00	3,000.00	3,000.00
Employment Stabilization Board (Newly Created)	.....	.....	90,000.00
Radio Division (newly created)	.....	.....	649,540.00
Aircraft in Commerce (newly created)	.....	.....	10,372,555.64
Patent Office[1]	.....	.....	5,272,950.00
Bureau of Mines[2]	.....	.....	2,294,348.25
	$10,329,608.44	$23,912,394.42	$54,959,586.76

[1]Expense of Patent Office in Interior Department, Fiscal Year 1925, before transfer to Commerce ..... $ 2,812,789.11
[2]Expenses of Bureau of Mines in Interior Department, Fiscal Year 1925, before transfer to Commerce ..... $ 1,900,821.27
"Our Wonderland of Bureaucracy," page 79, James M. Beck.

has increased from less than $700,000,000 in 1910 to approximately $4,000,000,000 in 1923. What is true of the Federal government is equally true, comparatively speaking, of state and local governments.

"Not long ago, *The Nation's Business*, one of the most energetic crusaders for deflation of government, presented a few statistics which make it easy for the physician to understand why Congress is scratching its head over the question of balancing the Federal budget and how much it must hike the Federal income tax rates.

Says "The Nation's Business" in its table the costs of certain activities of the Federal government for 1925 and 1932 were listed as follows:

Board of Tax Appeals, $350,000 in 1925; $660,000 in 1932.

The following tabulation from the Annual Report of the Secretary of the Treasury tells the story:

(Figures to Nearest Hundred Thousands)	1927	1932	Amount of Increase	Per cent Increase
TOTAL EXPENDITURES	$3,493,600,000	$4,482,200,000	$ 988,600,000	28%
Less—Interest and Sinking Fund Payments (Statutory)	1,120,500,000	1,016,800,000	*103,700,000**	9*
Less—Miscellaneous—Not included in Budgets of Major Departments	409,100,000	270,300,000	*138,800,000**	34*
BALANCE—Which Was Expended by Major Departments, Commissions, etc., as follows:	$1,964,000,000	$3,195,100,000	$1,231,100,000	63%
Department of Agriculture	$ 156,300,000	$ 333,500,000	$ 177,200,000	113
Agricultural Marketing Fund—Net (Farm Board)	.....	155,000,000	155,000,000	...
Post Office Deficit	27,300,000	195,000,000	167,700,000	614
Treasury Department	151,600,000	312,900,000	161,300,000	106
War Department	360,800,000	483,700,000	122,900,000	34
Navy Department	318,900,000	378,900,000	60,000,000	19
Shipping Board	19,000,000	60,800,000	41,800,000	220
Department of Justice	24,800,000	53,800,000	29,000,000	117
Department of Commerce	30,900,000	54,700,000	23,800,000	77
Other Independent Offices and Commissions	35,400,000	57,600,000	22,200,000	63
Legislative Establishment	19,700,000	32,400,000	12,700,000	64
Department of Labor	9,900,000	14,100,000	4,200,000	42
Adjusted Service Certificate Fund	115,200,000	200,000,000	84,800,000	74
Veterans' Bureau (Veterans' Administration Since 1930)	391,500,000	784,400,000	392,900,000(A)	100
Interior Department	302,700,000	78,300,000	*224,400,000*(A)*	*74**
TOTAL OF MAJOR DEPARTMENTS, COMMISSIONS, ETC.	$1,964,000,000	$3,195,100,000	$1,231,100,000	63%

*Indicates decrease.

(A)—Since the Bureau of Pensions was transferred from the Interior Department to the Veterans' Bureau in 1931, in order to make a fair comparison with 1927 it is necessary to combine the expenditures of the Interior Department and the Veterans' Bureau for each period, which results in an increase in expenditures in those two divisions of $168,500,000 for 1932 as compared with 1927.

Bureau of Efficiency, $150,000; now $200,000.

Civil Service Commission, $1,000,000; now, $1,500,000.

Employes Compensation Commission, $2,250,000; now, $4,500,000.

Federal Board of Vocational Education, $5,500,000; now, $10,000,000.

Federal Farm Board, did not exist in 1925; now, $1,500,000 exclusive of advances for purchase of farm commodities.

Federal Power Commission, $30,000; now, $300,000.

Federal Radio Commission, did not exist in 1925; now, $400,000.

Interstate Commerce Commission, $4,000,000; now, $9,000,000.

Federal trade Commission, $1,000,000; now, $1,800,000.

Tariff Commission, $700,000; now, $1,250,000.

Veterans Bureau, $300,000,000; now, $735,000,000.

Bureau of Animal Industry, $10,000,000; now, $16,000,000.

Bureau of Dairy Industry, $450,000; now, $800,000.

Bureau of Plant Industry, $3,600,000; now, $5,800,000.

Forest Service, $10,000,000; now, $20,000,000.

Bureau of Chemistry, $1,400,000; now, $2,000,000.

Bureau of Entomology, $2,000,000; now, $2,800,000.

Public roads, $13,000,000; now, $125,000,000.

Bureau of Agricultural Economics, $4,500,000; now, $7,250,000.

Home Economics, $100,000; now, $250,000.

Bureau of Standards, $1,750,000; now, $2,750,000.

Bureau of Foreign and Domestic Commerce, $2,700,000; now, $5,250,000.

Bureau of Fisheries, $1,300,000; now, $3,000,000.

Bureau of Aeronautics, $500,000; now, $10,000,000.

Bureau of Immigration, $4,500,000; now, $10,000,000.

Bureau of Naturalization, $700,000; now, $1,100,000.

Women's Bureau, $100,000; now, $150,000.

Employment Service, $200,000; now, $900,000.

The article also compares the total costs of the major departments for 1925 and 1932 as follows:

Agriculture, $155,000,000; now, $243,000,000.

Commerce, $25,000,000; now, $50,000,000.

Interior, $83,000,000; now, $85,000,000.

Justice, $22,000,000; now, $50,000,000.

Labor, $8,000,000; now, $14,000,000.

Navy, $330,000,000; now, $360,000,000.

State, $16,000,000; now, $17,500,000.

Treasury, $147,000,000; now, $267,000,000.

War, $340,000,000; now, $330,000,000.

Quoting another keen observer who has made a careful study of similar statistics, commenting on the startling facts he had uncovered, said:

"There's an increasing and insistant demand that taxes be reduced. What stands in the way?

"The fact that the very men and women who want taxes reduced don't want government expenditures cut. That is, they don't want their own pet expenditures cut.

"Some time ago, I asked this question bluntly of Representative Will R. Wood of Indiana:

" 'Is there any way of reducing government expenditures?'

"His answer was:

" 'No, except in the Army and Navy. If you try to reduce the expenditures of government departments you meet too much organized opposition in Congress.

" 'There is too much 'If you'll help me save this for my constituents I'll help you save that for yours.'

"This is the great obstacle in the task of making government cheaper."

These are a few reasons why physicians are being compelled to dig deep, even until it hurts.

TOO MANY LAWS AND TOO MUCH REGULATION A MENACE TO MEDICAL AND CIVIC PROGRESS

Too many laws and too little respect for them is American plague. Cost of upkeep of paternalistic regime and its theft of personal intimate privileges beggars United States citizens as one person out of every seven is on public payroll, income tax exempt, and public servants and pensioners are increasing at a rate unknown to previous history.

Overcentralization at Washington usurps individual rights. "The least government is the best government." New and interfering laws multiply in the United States as rapidly as the staggering tax levies that are required to pay for the administration of meddling statutes that nobody wants and nobody needs except members of the bureaucracy rapidly destroying personal freedom and making this country the worst of autocracies. The situation parallels pre-revolution France.

"America is forced by law to do, and prohibited by law from doing more things than had been prohibited or required in autocratic Europe before the war." Bureaucracy is always a curse, and centralization a lethal menace under any conditions. Where the practice of medicine is concerned, it is fatal.

NEARLY HALF MILLION DOLLARS SAVED IN READJUSTMENT OF VETERAN'S APPROPRIATIONS

In President Roosevelt's economic program there is an estimated saving of upwards of $450,000,000 annually in veteran's appropriations. This huge amount is cut from the veteran's expenditures without taking anything from veterans with service connected disabilities. The figures mentioned are approximately the amount that the medical profession have for several years estimated could be saved by proper regulations of the appropriations for veteran's disability. A few of the conspicuous items of savings are, the elimination of the non-service connected disability allowances of approximately $225,000,000, allowances to Spanish American War Veterans of approximately $100,000,000 and nearly $50,000,000 by saving through a new schedule of disabilities.

Every member of the medical profession is justified in feeling a certain pride in the contribution that organized medicine made to this extraordinary victory. The campaign of information carried on over the last few years in medical journals and otherwise gave to the people the real truth pertaining to the defects, inequalities and inequitable features of the existing veterans law. Our propaganda helped to convince the voters and the tax payers that we could pay, and pay generously, to every veteran and the family of every veteran who had become disabled through wounds of illness in service, and at the same time save millions in political pensions.

THE MAJORITY REPORT OF THE COMMITTEE ON THE COSTS OF MEDICAL CARE NOT ONLY SELLS THE MEDICAL PROFESSION INTO BONDAGE BUT HOLDS UP THE TAX PAYER FOR THE PRICE OF THE SALE

Unabatedly the roars of protest and even of derision keep up from laity and profession as to the majority report of the Committee on the Costs of Medical Care. You might almost think that what H. L. Mencken terms "a viper of the medical profession" in his figurative reference to the esteemed committee, had managed to bite itself instead of medicine at large and the general public, and, most specifically the great and groaning tax-paying body. Few authenticated cases, if any, go to prove that any organism can die of its own venom, yet such a result would be no more of a Munchausen stunt than that glaring majority report to the poisonous provisions of which so many exceeding fine members of the laity subscribed their names more in ignorance than in sin, and so found themselves and their names in company with those of some highly regarded professional and scientific men whose signatures certainly were set down more in enthusiastic, optimistic, millienniumistic altruistic flab-dabbery rather than with scientific precision.

Perhaps those medicos and statisticians should not be blamed too much. Even the immortal Patrick Henry declared "It is natural for man to indulge in the illusions of hope."

But Pat, the wise old patriot, knew that illusions were not the foundations upon which to build a country nor breed a nation. So he threw illusions into the garbage can, or the sluggish Philadelphia gutter, and set about finding a rock upon which might stand the greatest edifice ever reared by democracy.

It begins to look as if to the medical profession would lie the task Patrick Henry and his contemporaneous patriots begun. Their mantle would seem to lie upon Aesculapian shoulders.

Cleanliness and revision, like charity, need to begin at home. And before the medical profession, even in the cause of patriotism, begins to dust up its neighbors' doorsteps, there is a fine job waiting squarely upon its own threshold. Among other bits of undesirable flotsam and jetsam to be removed and scrubbed after, is this pathetically inept, almost ludicrous majority report of the Committee on Medical Costs.

Perhaps after all, the committee was not thumbing its nose at the medical profession but at the tax-paying general public when this report was drawn up. For by the same token that its workings when begun and its recommendations if followed make of the physician merely a much lambasted cog in the wheels of state, it also makes liable for the bills for the oil and steel and grinding and mechanical care of that cog, the already groaning and protesting tax-payer. In ladling out upon this poor little tax-payer,—you, and I, and the man across the street, and the underpaid clerk around the corner—this federal and governmental support of medicine and its workings that is known as state-medicine, *the majority report of the Committee on the Costs of Medical Care not only sells the medical profession into bondage but holds up the tax-payer for the price of the sale.* The process goes the old Army game one better by selling a man something that he does not want at a price he cannot pay.

What the medical profession and the taxpayer want right now is not only an Abraham Lincoln to free them from the Legreeishness of professional uplifters and socialistic looters but a Harriet Beecher Stowe and a Julia Ward Howe to get busy on proper propaganda to get the case of the abused before the public, and perhaps before the very abusers themselves.

Meanwhile the water never came down at Lodore with greater flurry and flush than falls and rages this very Niagara of protest at the yoke this committee would rivet upon the necks of the served and the server alike. Who wants this socialistic report, anyway? Who asked for it? Did the ex-ruler in the White House, whom Mencken calls "The late Wonder Boy" set the yeast that started this committee on a job of leavening "costs" for illness? God only knows and only He will tell. To the astute medico ever since the committee started to function on May 17, 1927 it bore all the earmarks of a "nigger-in-the-wood-pile" with a big bandwagon trailing on behind.

Now if the report means that this concealed

Ethiopian's job is to throw the burden of the doctors on the taxpayers of a certitude no self respecting bunch of men like the medicoes is going to barter the freedom they think they have for the sake of a few brass buttons that will turn them into public functionaries. After all "putting the costs of medical care upon a group payment basis, through the use of insurance, through the use of taxation, or through the use of both of these methods" is a whole lot of hoo-ey that belongs over in the soviet where cuckoos thrive and chaos holds a Roman holiday.

What Mencken calls "boards of public busybodies and gang politicians" get their Vitamin A from there, spiritually speaking anyway. Witness the plea in the propaganda of "the extension of all basic public health services, whether provided by the governmental or non-governmental agencies so that they will be available to the entire population according to its needs."

If ever there was a joker to let a bunch of brick-layers give orders as to the conduct of an obstetrical ward there it lies in that phrase, "or non-governmental agencies." And what a bunch of suckers the compilers of that majority report must consider the medical men to be when they drew that up, LET ALONE THE TAXPAYERS!

Perhaps the kindest comment, from professional lips, that has been uttered about this majority report is that "as a theory it is grand, but there are a great many times when grandeur does not fit into the scenery, and oftener yet when grandeur is not sound structure. In fact grandeur is more likely to be generic than specific and in taking care of the sick, usually it is the very specific that counts. To solve the problem of the medical security of the American people both science and vision and a practical idea of responsibility as well as a great deal of horse sense is going to be needed and needed sadly. Only physicians can solve the problem, because only the physicians realize all the ramifications of the problem. It has been their problem and they have learned it down through the ages. The burden of solving the medical impasse should not be placed upon the government. Governments are doing so well at their own job anywhere in the world. Certainly not by business either for business is based on profit and with medicine it is service first and profit afterwards as the self sacrificing lives of countless physicians reveal. The ministry, the law and medicine are the three items of leaven that make life possible and human, and all three should be beyond the pale of commercial rule and regulation. Their source of supply, their nucleus of existence lies in ethics and in service. Trained in such exactitudes these three redemptive, protective and preservative professions are qualified in ways through which laymen should not dare to try to walk.

What little hope there is for the medical profession in the report of this elaborate and extravagant committee lies in the minority report. Within the lines of this opinion are germs of the seeds that may bring a more fruitful season for healthful medical economics. But the greatest hope of all lies in the hour when the man on the street will turn around and take "the beam from his own eye" letting the medical profession struggle with its own motes.

MENCKEN MAULS MAJORITY REPORT OF THE COMMITTEE ON COSTS OF MEDICAL CARE

Henry L. Mencken's magazine "The American Mercury" flings wide and far the standard of intolerance for intolerance, and holds a niche of its own in the worlds of culture and literature.

What a wry grimace, then, must wreathe the lips of those of the intellegensia, who formed the backbone and the vocal organs, if not the brain, of the "Committee on the Costs of Medical Care" when they read the article "What Is Going on in the World," the lead for the March 1933 number of Mr. Mencken's magazine, and signed by "H. L. M.," himself!

Mr. Mencken's writings need no comment. They speak for themselves. Only direct quotations can do them justice. Anything else is to "paint the lily, gild refined gold." From the liberal excerpts Mr. Mencken permits the Illinois Medical Journal to quote herewith an idea may be gained of the truth of Mr. Mencken's vision as well as the damascene sharpness of his inimitable wit!

Mr. Mencken's final pronouncement on the entire report is as trenchant as it is terse. Writes he, in conclusion:

"In all this, I may seem to be venturing to tell the medical granddams how to suck eggs. If so, I apologize most humbly. My excuse is that the report which now disturbs them is addressed, not to the profession only, but to the general public, and that its recommendations, if carried out, would make every American his brother's keeper with a vengeance. That they lie within the range of practical politics I doubt seriously; the movement, indeed, has begun to turn in the other direction, and I hope to see the day when health departments are restored to their proper business of dealing with *general* menaces to the people's health, and free medical service is restricted to the actually indigent. (I begin to be so optimistic, indeed, that I even look for the day when the public schools will be confined to teaching the three *r's to the children of the poor*, and all their present costly soarings will be only a dream dimly remembered.)

"But though the doctors seem to run no hazard of being converted into robots operated by politicians, as they might be if the committee's recommendations were put into thoroughgoing execution, they still face a very unpleasant professional situation, and it is no wonder that they discuss it in some alarm. Their remedy, as I have ventured to hint, is probably in their own hands. If, on the one side, they will unite in a genuine effort to throw off the uplifters who now victimize them, and on the other side try to rid their customers of the grotesque idea that being ill is a romantic business, and an excuse for the indulgence of levantine luxury and the waste of a great deal of money, most of it not in hand—if they will proceed realistically in both of those directions they may conceivably throw off some of the difficulties which now beset them.

"I confess that it always irritates me to hear medical men denounced as prehensile, as is often done, not only by quacks, but also by persons who should know better. They are actually, with very few exceptions, fellows of a vast and innocent sentimentality. The great majority, indeed, might be described with perfect accuracy as easy marks. The men of no other profession are so facilely operated on by specialists in other peoples' duties. They walk into the arms of every new uplifter who happens down the road. My hope is that the report of the Committee on the Costs of Medical Care, with its bald proposals to reduce them to a kind of peonage, will at last awaken them to the fact that they also owe some duties to themselves, and that, with everything else equal, the more they regard those duties the better they will be able to serve their actual patients.

"The health departments of the land, so far, have not got away with so much public money as the public schools, nor indeed with half so much, but they are certainly getting away with larger and larger sums every year. A generation ago their activity was pretty well confined to compiling vital statistics, to safeguarding water and food supplies, and to maintaining quarantines against contagious diseases, but of late they have gone in for doctoring and nursing on a truly colossal scale, and when the supply of customers runs out they actually send out catchpolls to track them down. If the free dispensaries be counted in as part of their service—and the committee itself apparently so counts them—then the health departments have gobbled at least a half of the work that private doctors were doing thirty or forty years ago.

"What this competition means to thousands of hard-working and competent medical men was made very vivid to me some time ago by the experience of an old friend. He was a doctor in a poor neighborhood in a large American city, and for almost three decades he had rendered good and faithful service to a large body of satisfied patients. He was no Osler, of course, but he took his profession seriously, kept up his studies, and was a pretty good all-round doctor. For years he made a comfortable living—delivering babies, lancing boils, looking at tongues, prescribing castor oil, and carrying out all the other procedures of a modest general practitioner. During the great influenza epidemic of 1919 he handled 200 cases, signed death certificates for only six patients, and was scarcely out of his clothes for a month. He was, in his neighborhood, a man of eminence, and he was not unknown outside it.

"But then the health department of his town began to go into the medicine business, and in a few years his practice was as good as ruined. Half a dozen free dispensaries of one sort or

another were opened in his bailiwick, and nurses on the city payroll began to rove the streets in municipal Fords, seeking prospects. One of his chief sources of income, in his palmy days, had been his obstetrical practice. He delivered babies at $20 a head, and took in enough at the business to pay his rent. But now the city nurses began pouncing on his patients at the first sign of divine retribution, and by the time those patients came to term they were installed luxuriously in some tax-supported maternity hospital, and having the time of their lives. My friend, of course, could not remonstrate with them, but it was at least ethical for him to make some discreet inquiries. 'The nurse told me,' he was commonly informed, 'that I could get a professor to help me—and it wouldn't cost a cent.'

"In a few years the practise of this laborious and worthy man was ruined, and he fell into grave difficulties. All of his more thrifty patients left him; there remained only a few dead beats to whom rooking the doctor was half the fun of being ill, and a rather larger body of insolvent morons who avoided the dispensaries in fear that the medical students supposed to lurk there would slaughter them to get their bones. Presently my friend became ill himself, and what remained of his once comfortable income ceased altogether.

"His colleagues, including some distinguished specialists, attended him gladly and without charge, for such is the fraternal custom of the craft, but the incidental expenses of his illness were heavy, and after it had gone on for a couple of years his reserves were almost exhausted. When he died at last he left next to nothing. This was the net reward of a quarter of a century of hard work. This was the natural fruit of state medicine, urged by fanatics and paid for by fools."

Few pens have probed the pathos of the professional uplifter's slaughter of the old-fashioned family doctor as does "H. L. M.'s" in this same article. To quote again:

"The doctors, in their combat with the visionaries of the committee, are handicapped by the fact that they are themselves largely responsible for the situation which gives its soarings whatever plausibility they may have. On the one hand they have not offered sufficient resistance to the evil tendency, so apparent since the turn of the century, to make medical care more and more expensive, and especially hospital care. And on the other hand they have given far too much encouragement to the baleful proliferation of free service. If now, with a Depression in full swing, those costs begin to be prohibitive to larger and larger numbers of patients, and they go flocking to the dispensaries for the treatment that they can't afford to pay for, it is certainly not surprising to find the professional do-gooders, who are always eager for more power, reaching out eagerly for the whole business, and proposing to reduce the doctors to the estate and dignity of hirelings working for them, and at their direction.

"I do not believe that the doctors, taking one with another, have profited to any considerable extent by the vast increase in the cost of medical care. The average income among them is probably not much more today than it was twenty years ago: if it has grown at all, then it is only to the extent that other professional incomes have grown. The general practitioner, indeed, is probably worse of today than he was then. Nor has most of the excess gone to the specialists. It has gone to the hospitals, and they have got it, not in the character of institutions for the care and cure of the sick, but in the character of luxurious hotels for the entertainment and flattery of the sick.

"Their luxuriousness is naturally most visible in the gaudy quarters and elaborate attendance provided for the rich, but it runs all the way down the line to the wards and dispensaries, and the cost of lodging a free patient has increased at almost the same rate as the cost of lodging a pay patient. In most hospitals of any pretensions caring for the former now actually costs more *per diem* than the average American hotel gets for a room, a bath and three meals. But this luxury, great as it is, is not enough for the patient who has to give any thought to his social dignity. He must buy more if he would keep up with the Joneses—and not infrequently that keeping up with the Joneses precipitates him into such a financial disaster that he is the rest of his life recovering from it.

"A substantial part of the increased cost, of course, is due to improvements in the art of

medicine. Not a few of them call for expensive apparatus, and all of them call for kinds of skill that cannot be had for nothing. It is obviously far more costly to make a series of x-ray plates and cardiograms of the heart than it used to be to do the whole job with a stethoscope, or even with the naked ear, as was the custom when I was young.

"But all of these costs are very easily exaggerated. They run, at most, to a great deal less than the costs of mere comfort and convenience. A large part of them even in the case of pay patients, are performed by persons who are notoriously underpaid—for example, hospital internes and student nurses—and all of them may be obtained by any reasonably prudent person at very moderate rates. What runs up the bill is the elaborate attention and entertainment that commonly go with them. Theoretically, it should be cheaper to treat a patient in a hospital than in his home, but actually, as everyone knows, it is immensely more expensive. He is housed in a building that commonly represents and investment of millions, he is boarded and lodged as comfortably as in a first-rate hotel, and in addition he is looked after day and night, in his special capacity of invalid, by a staff of persons who, however little they are paid in cash, must still be housed, fed and somehow clothed.

"It all runs to a formidable sum, even for light illness. People will not go to a hospital that has the name of being run parsimoniously; they prefer the gilded hell which offers all the latest luxuries, from sunbaths on the roof to bedside radios. They like to think that they have had the whole works; it somehow caresses their *amour propre,* and gives them a standing with the neighbors. Years ago, patients emerging from surgery used to devote their talk mainly to their sensations on going under the ether: now what they talk about is the cost of the adventure. And even those who pay nothing, I am informed, get pleasure out of the thought that the bigwigs who looked after them, if paid at all, would have been paid a lot.

"What is to be done about this I do not know, and neither, apparently, does the Committee on the Costs of Medical Care. The scheme it proposes would not really diminish those costs; it would simply tend to load them, in the long run, upon the taxpayer, and so encourage their infinite increase. The doctors themselves, realizing the gravity of the situation, have attempted to meet it in various American cities by setting up hospitals, or parts of hospitals, for patients of the so-called middle class—that is, for patients who are able to meet a reasonable expense when they are ill, and do not want to accept charity, but are yet too poor to maintain themselves for months on the scale of a bootlegger at Palm Beach. The trans-Atlantic steamship companies showed the way here when they began to operate one-cabin boats—comfortable enough for any rational person, and yet much less expensive than the fashionable liners.

"But the middle-class hospitals have been anything but roaring successes, save maybe in a few places. The very fact that they are relatively cheap seems to be the chief objection to them; the normal American, when he is sick, is eager for the best attention that he can get, and the general habit of mind of the country, apparently surviving the Depression, makes him believe that the best is necessarily the most expensive."

Says Mr. Mencken further

"The doctors have let themselves be hustled and run amuck by the public health brethren. The public health business tends more and more to fall into the hands of professional uplifters, and they spend a great deal more time discussing what ought to be done than what can be done. Their chief postulate seems to be that it is the bounden duty of the state to take care of every citizen who can't or won't take care of himself, and they are always eager to pour out the taxpayer's money to that end. But there is really no such duty. The really helpless and friendless sick, of course, must be cared for, if only to keep them from shocking the well by lying in the gutters, but the public responsibility does not go half so far beyond that simple business as uplifters appear to think.

"Nor as a good many otherwise sensible doctors have apparently come to think. They have, in their charity, allowed themselves to be imposed upon in a gross and shameless manner. They begin by giving free treatment to persons whose inability to pay for it is only too obvious, but bit by bit they find themselves

facing larger and larger hordes of dead-heads, until in the end, at least in certain fields, there are precious few pay customers left. The public schools, now in process of rational liquidation at last, have led in this movement, but the public health uplifters have followed hard upon their heels. The dubious doctrine that what ought to be done must be done has been converted into the even more dubious doctrine that what ought to be done must be done free, and as a result great multitudes of Americans, hitherto willing enough to pay their way, have been converted into mendicants, and a large part of the burden of their mendicancy has been thrown upon the medical profession.

There is, as a matter of fact, no plausible reason for arguing, as uplifters always do, that the privilege of first-rate medical care is a right that every free-born American acquires at birth, regardless of his merits or his means. It is nothing of the sort. Charity is not a franchise; it is only a favor, and it is a favor properly offered to the really helpless, and to no one else. It may impose upon the benefactor something that he chooses to regard as a duty, but it certainly gives no vested right to the beneficiary. In this region, as in others, sentimentality is a potent weapon in the hands of uplifters. They are adepts at convincing their betters that what they think ought to be done is ordained by God, and cannot be evaded without grave breach of decency. But though they know how to win customers for that idea, it remains nonsense all the same.

Thus the doctors are beset by uplifters on the one side, as they are beset by quacks on the other, and it is no wonder that they begin to be concerned about the future of their trade. The report of the Committee on the Costs of Medical Care has shaken them mainly because it seems to show that the uplift is beginning to invade their own house. But the truth is that it has been there for a long while, and with their own innocent connivance. If they were converted into public jobholders tomorrow, as the committee proposes, they would scarcely be much worse off than they are in many an American community today, with free dispensaries taking half of their patrons away from them, and luxurious hospital-hotels bankrupting the rest, and so leaving nothing for their own fees.

"Just how they are to get out of these difficulties I do not know. My gift for constructive criticism is indeed somewhat meagre. But two or three devices to the desired end are so obvious that even one who tears down without building up may discern them. One of them is to undertake a more bilious scrutiny of applicants for free service, and of agencies which seek to provide it. The doctors have let the public health and public schools schemers run away with them. They should have resisted this movement vigorously, as the lawyers in like case would have certainly resisted it, but in only too many American communities they have helped it on, thus acquiescing idiotically in their own destruction.

"In particular, the magic words, preventive medicine, have upset them, and led them into transparent follies. The first duty of a doctor, in prevention as in cure, is to his own patients, and not to a vague and miscellaneous mass of people who ought to be other doctors' patients. The limits of prevention are fixed by Nature, and within the limits of private practise they are plain enough, but when a medical man succumbs to uplifters and begins to rove the wide pastures of Utopia he sometimes loses all contact with fact, and begins to talk as foolishly as the uplifters themselves. If all the health departments ran as wild as the public schools were lately running, and every crazy scheme to abolish death were in full operation, people would still continue to die. The postponement of that event can never be achieved so effectively by public functionaries as by private practitioners. The man who can really manage it, in so far as it is possible at all, is the family doctor, and he will succeed in proportion as he devotes himself to his actual patients, and lets the rest of humanity take care of itself.

"Both the report of the Committee on the Costs of Medical Care and the caveats of those members who dissent from it lay great stress upon the importance of this family doctor. He has been forced into the background of late by the specialist and even more by the encroachments of state medicine. The committee proposes to save him by attaching him to a hospital and making a sort of minor bureaucrat of him. But this, manifestly, would not help him. On the contrary, it would widen

still further the breach which now opens between him and his patients, and make him still more the satellite of the specialists. The way to restore his old importance is to restore his old functions, and that is certainly not going to be done by transferring even more of his patients to hospitals.

"What is needed, I suppose, is a revival of the home care of the sick. In some part, of course, it must be impossible, for there are not a few medical situations in which, considering modern methods of treatment, home care would be almost equivalent, to no care at all. But the number of such situations is probably considerably smaller than most laymen have come to think. A competent doctor is still capable of taking care of the overwhelming majority of his patients without lodging them in an expensive hotel, and if he had well-trained midwives and practical nurses to help him he could probably look after many more.

"In this department, as both the majority and minority of the committee say, there has been bad planning. The hospitals have trained so many nurses that there is now an enormous oversupply of them, but they have been trained for hospital work, and are far less useful elsewhere than they ought to be. If there were a large body of nurses especially instructed in the care of patients at home there would be less tendency to seek hospital care for every trivial sore throat or sore thumb, the cost of illness would be very materially reduced, and there would be more money left for the doctor's bill."

PROTOZOAL SURVEY OF ONE THOUSAND PRISONERS: CLINICAL DATA ON NINETY-TWO CASES OF AMEBIASIS

In a protozoal survey of 1,000 inmates at San Quentin Prison, H. G. JOHNSTONE, N. A. DAVID and A. C. REED, San Francisco (*Journal A. M. A.*, March 11, 1933), observed infestation with Endamoeba histolytica in 9.2 per cent. Seventy-eight of the ninety-two men with E. histolytica infestation lived in or had visited areas in which it is well known that amebiasis is endemic, and thirty-six of these had lived in tropical regions at one time. Fifty-two men had experienced notable gastro-intestinal upsets, twenty-eight having complained of indigestion, sixteen of diarrhea or dysentery, and twenty-three were bothered with constipation when examined. Thirty-nine men stated that they did not have gastro-intestinal complaints. Of these, twenty-seven were under 30 years of age and in most cases had only recently been to endemic areas.

LIEN LAWS MAY BE SOLUTION OF ECONOMIC LOSS FROM ACCIDENT

As it is an admitted fact that the country has far too many laws already it would seem that there might be discovered some method for offsetting the lamentable loss from hospital and medical care for automobile accidents, other than the discussed lien laws.

Yet action of a sort and of an efficacious sort is indicated. The lien laws now in force in six states appear to be lacking in efficacy. Delaware, Montana, New Jersey, Virginia, Nebraska, and Oregon own lien laws applicable only to the proceeds of some right of action by the patient upon some third party, either in the way of recoverable damages or of insurance against casualty. None of the six states contains legislation extending to property rights, wages or similiar assets of the patient. As the tendency of current legislation is to extend rather than to narrow the exemption of the debtor, and that not without merit, it is hardly to be supposed that this personal property or production lien would ever be added. In Wisconsin the State Board of Health estimates that in a year, through unremunerated care for victims of motor casualties, physicians and hospitals lose annually in excess of half a million dollars. The Ohio hospital associations put the figure for Ohio in excess of $300,000 for the same term. In Illinois it has been estimated at about $1,000,000.

Wisconsin has been investigating the merits of a lien law. The conclusion in that state appears to be that it will be of little practical benefit and as with the federal farm relief laws, that even if a law is passed that the need for relief will continue for some time. Taking a few Wisconsin figures for a working example, statistics show that in 1929 something over 28% of all automobiles in Wisconsin carried public liability, a total decrease in these days of depression, and with increased rates. Now with an estimated lack of motor insurance in perhaps 85% of the cases, what good is a lien law that applies only to the recovery of damages from insurance?

Yet some action must be taken for this really gruelling loss. The majority of persons hurt in such accidents are of small means,

and cannot afford to pay for the nursing, hospital and medical care demanded by their dire straits. Nor is it fair to pass another burden upon the already overburdened taxpayer by making the payment for carelessness on the part of the individual come out of the pockets of an already well mulcted community. It is of authenticated note in the bargain that many a patient, promising the physician and hospital to pay such bills for treatment and care from damages when received, often gets the damages and forgets his personal salvage obligations.

Just where the cure lies remains to be seen. The immense number of damage suits either thrown out of the courts or dragging along endlessly at further expense to the taxpayers does not seem to point to any more laws as a panacea. Here is another chance for a Steinmetz of economics to step out front and produce a remedy.

REVIEW OF LEGISLATIVE SITUATION UP TO DATE
REPORT OF THE LEGISLATIVE COMMITTEE

The Fifty-Eighth General Assembly of the State of Illinois has been in session for thirteen weeks and has enacted about thirty different measures. The total appropriations to date for all purposes have been a little over $100,000. Almost $100,000 of this amount is to be spent for the emergency duty of the National Guard. There have been two prohibition laws passed and a sales tax. More than one thousand bills of various kinds have been introduced in the present session.

The Legislative Committee has had a considerable number of inquiries regarding the sales tax and as to how it will affect the medical profession. In conversing with the Chairman of the Legislative Committee, one of the attorneys connected with the legal department of the State made a few observations as to the probable effect it would have on physicians. He explained that there would be no tax on a physician's services, but in the event the physician dispensed and charged for his drugs a three per cent tax on such sales would be returnable. If no charge were made for the drugs, no tax would be set up.

In the case of a hospital, it was his opinion that the cost of a hospital room, including nurse and the usual care, would be classed as a service and not taxable. However, food charged to the patient should be kept separate, in that it is taxable as are medicines or other supplies which could not be classed as a service charge.

An interesting inquiry has come up as to whether dentists would have to pay a tax upon gold used in bridge-work and for other appliances sold to the patient. This decision would necessarily have to come from the Attorney-General.

The attorney said that despite the fact that an injunction has been filed against the Act, it would be much wiser for physicians to keep records of the sale of drugs from April 1st on. The Chairman of the Legislative Committee at Springfield has a number of the sales tax bills which may be had upon request.

Senate Bill 144, one of the welfare group of bills, is being opposed by the Society, in that it sets up adequate machinery for state medicine. The bill has passed the Senate, together with a group of other welfare bills and is now pending in sub-committee in the House. The Legislative Committee does not at this time request help on defeating the objectionable portions of the bill, but in the event that it is reported to the Floor of the House, and the objections have not been removed, the usual procedure in getting such information to your legislators will be asked.

The chiropractors are resorting to a sympathetic appeal by mail to the Governor asking that he direct the Legislature to give them relief from the present Medical Practice Act.

The osteopaths have had their two bills prepared for a long time. They are being withheld pending the opportune time for introduction by the legislative committee.

Each session of the Legislature has one or more facetious bills that have to do with the treatment of human ailment, and the strangest one up to date permits anyone to take a plaster impression of a person's mouth to have false teeth made, the procedure not to come under the Dental Practice Act. Presumably, this bill is sponsored by a mail order dental laboratory in Chicago which manufactures plates from such impressions and sells them by mail.

Bills touching on a number of subjects of interest to the medical profession have been in-

troduced and are being closely observed by the Legislative Committee. Among others is a uniform narcotic act, a bill to permit courts to require physical examinations of an injured party, one to require life insurance companies to furnish persons rejected with a copy of the physician's examination, a House bill amending the Workmen's Compensation Act to include occupational diseases.

A Senate bill would impose a one and one-half per cent tax on the incomes of physicians and other professions and occupations of $100 per month. The bill is still in committee.

The bill to require a physical examination of the contracting parties before marriage has been reported favorably to the Floor of the House.

The Medical Center bills for Chicago are to be heard in the very near future.

A bill is pending to abolish the licensing of midwives.

Bills are pending to give hospitals relief so that insurance companies, or others who are liable for an accident, shall pay the hospital, physicians, and undertakers direct. Another would give a doctor prior claim in an estate, not to exceed $250, for the last illness.

The Silver Nitrate Bill has withstood all efforts to amend it and is on final passage in the Senate in its original form. It will be enacted next week.

The Anti-vivisectionists, smarting under the severe setback they have had in the three previous sessions, very graciously informed the Legislature that they would not introduce their bill this year to enable the legislators to devote their full time in the interests of the economy program for the State. Rather an odd gesture.

Another bill is pending to regulate maternity hospitals.

All bills of interest to the medical profession are being scrutinized closely and additional information will be given in our regular bulletin service. Inquiries regarding medical legislation may be made to the Chairman at Springfield.

UNDER ETHER

Unpopular Doctor: "Ah, I've caught you under the mistletoe. I must claim my kiss."

Pretty Girl: "No doctor, there's only one thing you'll ever have a chance of kissing me under."

Doctor: "What's that?"

Girl: "An anesthetic."

PROGRAM FOR THE ANNUAL MEETING

The preliminary program for the 1933 Annual Meeting of the Illinois State Medical Society to be held in Peoria on May 16, 17, 18, 1933, is published in this number of THE ILLINOIS MEDICAL JOURNAL.

This is not the official, completed program, and there will no doubt be some changes, and additions which will appear in the May JOURNAL. The Committee on Arrangements, and the Section Officers have been working hard to arrange things to make this Annual Meeting one to be long remembered.

As we go to press, we learn that some Societies on account of the present economic crisis, are postponing their annual meetings, but the Officers and Committees of this Society are working all the harder, to have an outstanding meeting in spite of all handicaps. The program is well balanced, and will all be given under one roof, the large, new Pere Marquette Hotel.

The members of the Illinois State Medical Society should once more realize that the annual meeting is their meeting, and they should plan to attend it. Peoria is centrally located, and readily accessible to all parts of the State by rail or auto, and with the network of hard roads to this Central Illinois Metropolis, Peoria can be reached from any part of the State within a short time.

Each County Society should be represented at the meeting, by members and of course by their own representatives in the House of Delegates. There are many important matters coming up for discussion in the House, and every component society should have a voice in the transactions.

The House of Delegates will be favored by a short analysis of the reports of the Committee on the Costs of Medical Care, by Rev. Alphonse M. Schwitalla, Dean, St. Louis School of Medicine and Surgery, St. Louis, who was a signer of the Minority Report. Father Schwitalla, a most forceful speaker, had an important part in the development of this Minority Report, and the Illinois State Medical Society is indeed fortunate in getting his consent to make this presentation at the meeting.

The completed, Official Program will be printed in the May JOURNAL along with

complete details concerning the arrangements for the meeting.

Now is the time for all good members of the Society to plan to be in Peoria for the three day session, May 16, 17, 18, 1933.

ILLINOIS STATE MEDICAL SOCIETY

EIGHTY-THIRD ANNUAL MEETING
PEORIA, ILLINOIS
MAY 16, 17, 18, 1933

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J. F. Sloan, *Vice-Chairman*.....Peoria
Walter Wyatt, *Vice-Chairman*.....Peoria
C. G. Blake .....Peoria
J. H. Ulrich .....Peoria
L. V. Boynton .....Peoria
F. L. Stiers .....East Peoria
F. Haas .....Peoria
E. L. Davis .....Peoria
P. F. James .....Peoria
R. L. Eddington .....Lacon
F. M. Meixner .....Peoria

LADIES' REGISTRATION

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Mrs. Orville Barbour .....Peoria
Mrs. Wm. Blender .....Peoria
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Mrs. P. A. Cusack.....Peoria
Mrs. H. F. Diller.....Peoria
Mrs. G. R. Seward.....Peoria
Mrs. H. L. Pintler .....Peoria
Mrs. A. P. Kannapel.....Peoria

COMMITTEE ON PRESIDENT'S DINNER

B. S. Adelsberger, *Chairman*.....Peoria
H. M. Wilson, *Vice-Chairman*.....Peoria
J. E. McCorvie .....Peoria
R. L. Green .....Peoria
G. U. Washburn .....Peoria
F. S. Davis .....Peoria
T. S. Egan .....Mapleton

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R. A. Hanna, *Vice-Chairman*.....Peoria
Wm. Major.....Peoria
E. E. Barbour.....Peoria
George Michell.....Peoria

COMMITTEE ON MEETING PLACES

MEDICINE

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J. W. Sours, *Vice-Chairman*.....Peoria
W. W. Cutter.....Peoria
A. A. Knapp.....Peoria
Clarence Fischer.....Peoria
T. C. Coggshall.....Henry
A. J. Foerter.....Peoria

SURGERY

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J. E. Bellas, *Vice-Chairman*.....Peoria
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Wm. Roche.....Peoria
J. H. Bacon.....Peoria

EYE, EAR, NOSE AND THROAT

Wright C. Williams, *Chairman*.....Peoria
C. H. Brobst, *Vice-Chairman*.....Peoria
C. D. Sneller.....Peoria
C. D. Thomas.....Peoria
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R. C. Bradley.....Peoria
E. L. Davis.....Peoria
A. B. Barker.....Peoria

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P. B. Goodwin, *Chairman*.....Peoria
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P. T. Spurck.....Peoria

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E. C. Burhans.....Peoria
L. C. Ives.....Peoria
G. L. Cohen.....Peoria
H. L. Yoder.....Morton

TRANSPORTATION COMMITTEE

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C. P. Strause, *Vice-Chairman*.....Peoria
J. R. Bierly.....Peoria
W. H. Holbrock.....Peoria
G. R. Seward.....Peoria
B. H. Trewyn.....Peoria
W. L. Bowen.....Peoria
A. J. Blickenstaff.....Peoria

EXHIBITS COMMITTEE

COMMERCIAL EXHIBITS

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M. T. Easton, *Vice-Chairman*.....Peoria
Sandor Horwitz.....Peoria
C. E. Scullin.....Peoria
S. A. Smith.....Chillicothe
D. D. Kirby.....Peoria

SCIENTIFIC EXHIBITS

M. G. Bohrod, *Chairman*.....Peoria
F. H. Decker, *Vice-Chairman*.....Peoria
M. Pollak.....Peoria
F. M. Meixner.....Peoria
A. E. Cohen.....Peoria
J. M. McCuskey.....Peoria

LADIES' ENTERTAINMENT COMMITTEE

FROM THE SOCIETY

Margaret B. Meloy, *Chairman*.....Peoria
Ethel Cooper, *Vice-Chairman*.....Peoria
Esther H. Stone.....Peoria
Helen C. Coyle.....Peoria
Lucia H. Lucy.....Peoria

FROM THE LADIES

Mrs. J. R. Vonachen, *Chairman*.....Peoria
Mrs. W. C. Williams, *Vice-Chairman*..Peoria
Mrs. H. E. Cooper, *Vice-Chairman*.....Peoria
Mrs. Arthur Sprenger.....Peoria
Mrs. W. A. Malcolm.....Peoria
Mrs. C. G. Farnum.....Peoria
Mrs. R. L. Green.....Peoria
Mrs. H. A. Vonachen.....Peoria
Mrs. C. D. Sneller.....Peoria
Mrs. R. A. Hanna.....Peoria
Mrs. C. E. Sibilsky.....Peoria
Mrs. C. U. Collins.....Peoria
Mrs. Allen Foster.....Peoria
Mrs. George Michell.....Peoria
Mrs. J. E. McCorvie.....Peoria
Mrs. C. W. Magaret.....Peoria
Mrs. J. F. Duane.....Peoria
Mrs. F. G. Morrill.....Peoria
Mrs. H. A. Durkin.....Peoria
Mrs. C. S. Turner.....Peoria
Mrs. Clarence Fischer.....Peoria
Mrs. S. M. Miller.....Peoria
Mrs. W. L. Bowen.....Peoria

Miss Mary Knapp.....Peoria
Mrs. George Parker.....Peoria
Mrs. B. S. Adelsberger.....Peoria
Mrs. M. T. Easton.....Peoria

ALUMNI AND FRATERNITY REUNION COMMITTEE

R. M. Sutton, *Chairman*.....Peoria
J. A. Eastman, *Vice-Chairman*.....Peoria
L. A. Burhans.....Peoria
J. T. Wead.....Wyoming
W. A. Borin.....Bartonville
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GOLF COMMITTEE

J. T. Jenkins, *Chairman*.....Peoria
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L. M. Coffey.....Peoria
H. F. Diller.....Peoria

LADIES' GOLF COMMITTEE

Mrs. W. W. Cutter, *Chairman*.....Peoria
Mrs. J. E. Bellas, *Vice-Chairman*.....Peoria
Mrs. H. M. Wilson.....Peoria

VETERANS' SERVICE ADVISORY COMMITTEE

E. A. Garrett, *Chairman*.....Peoria
E. E. Nystrom, *Vice-Chairman*.....Peoria
G. H. Stacy.....Peoria
A. E. Hubbard.....Peoria
T. W. Floyd.....Peoria

SPECIAL ENTERTAINMENT COMMITTEE

W. A. Michael, *Chairman*.....Peoria
E. P. Burt, *Vice-Chairman*.....Peoria
R. W. King.....Peoria
F. A. Causey.....Peoria
P. A. Cusack.....Peoria
A. D. Phillips.....Peoria
Elmer Seaburg.....Peoria
F. C. Hammitt.....Peoria
C. E. Sibilsky.....Peoria

HOTEL COMMITTEE

W. A. Malcolm, *Chairman*.....Peoria
E. C. Kelly, *Vice-Chairman*.....Peoria
Wm. Blender.....Peoria
A. S. Plummer.....Peoria
F. H. Maurer.....Peoria
J. B. Jennings.....Peoria
W. A. Gott.....Peoria
K. N. Petri.....Peoria
P. R. McGrath.....Peoria
Geo. Borin.....Peoria
P. F. Jones.....Peoria
Thos. R. Plumer.....Trivoli
Jos. Sparks.....Peoria
Jerry S. Bell.....Chicago

WOMAN'S AUXILIARY TO THE ILLINOIS STATE MEDICAL SOCIETY

OFFICERS

Mrs. E. W. Mueller, President.....Chicago
Mrs. Solomon Jones, *President-Elect*..Danville
Mrs. A. H. Brumback, *First Vice-President*.....Chicago
Mrs. E. S. Allen, *Second Vice-President*.Arcola
Mrs. F. P. Hammond, *Third Vice-President*.....Chicago
Mrs. Philip H. Kreuscher, *Corresponding Secretary*.....Chicago
Mrs. W. R. Rhodes, Recording Secretary.....Toledo
Mrs. A. H. Baugher, *Treasurer*.....Chicago

COUNCILORS

District 1. Mrs. D. J. Evans.....Aurora
District 2. Mrs. A. D. Middletown..Pontiac
District 3. Mrs. S. M. Goldberger..Chicago
District 3. Mrs. H. M. Peterson...Chicago
District 3. Mrs. W. D. Cubbins....Chicago
District 4. Mrs. C. H. Anderson.East Moline
District 5. Mrs. H. B. Henkel..Springfield
District 6. Mrs. C. B. Dearborn.Mt. Sterling
District 7. Mrs. C. M. Jack.....Decatur
District 8. Mrs. H. I. Conn.....Newman
District 9. Mrs. E. W. Burroughs.....Harrisburg
District 10. Mrs. I. L. Foulon.East St. Louis
District 11. Mrs. E. R. Steen.....Joliet

CHAIRMAN OF STANDING COMMITTEES

Organization....Mrs. Solomon Jones, Danville
Press and Publicity.....Mrs. F. P. Hammond, Chicago
Legislative.....Mrs. W. D. Chapman, Silvis
Printing.....Mrs. R. K. Packard, Chicago
Convention....Mrs. H. B. Henkel, Springfield
Program.....Mrs. T. O. Freeman, Mattoon
Revision.....Mrs. J. H. Hutton, Chicago
Public Relations.....Mrs. T. D. Cantrell, Bloomington
Credentials and Registration.....Mrs. Lucius Cole, River Forest
Hygeia.....Mrs. A. I. Edison, Maywood
Finance.....Mrs. A. D. Middleton, Pontiac
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Woman's Auxiliary Headquarters
Pere Marquette Hotel

Woman's Auxiliary Registration
Pere Marquette Hotel

VETERANS' DINNER

The annual dinner and meeting of the Veterans' Service Committee is being arranged by the Committee, to be held at the Pere Marquette Hotel, on Tuesday Evening, May 16th, at 6:00 o'clock. The exact program has not yet been completed, but it will be of interest to all former Service men, as well as all other members of the Society. Tickets for the Veterans' Dinner will be on sale at Registration Headquarters, and by all members of the Veterans' Advisory Committee, and everyone is invited to attend this interesting meeting.

WOMAN'S AUXILIARY AND ALL VISITING LADIES

Registration and Information Headquarters, Pere Marquette Hotel

Tuesday, May 16, 1933

9:30 A. M.—House of Delegates Meeting. (House of Delegates to comprise entire State Board of Directors and the County Delegates.)

10:30 A. M.—Auxiliary business meeting. Palm Room—Jefferson Hotel. Open to all members and guests.

3:00 P. M.—Informal Tea.

6:30 P. M.—Dinner and Bridge for all Convention women.

Wednesday, May 17, 1933

9:30 A. M.—Auxiliary business meeting. Palm Room—Jefferson Hotel. Open to all members and guests.

1:30 P. M.—Luncheon. (Arranged by Peoria Committee.)

2:30 P. M.—Meeting of County Auxiliary Presidents with new State President, Mrs. Solomon Jones. (To be held at same place as the 1:30 luncheon.)

6:30 P. M.—Medical Society President's dinner.

Thursday, May 18, 1933

9:00 A. M.—Post Convention Board Meeting.

SECRETARIES' CONFERENCE

T. D. Doan, *President*.....Palmyra
H. A. Felts, *Vice-President*.....Marion
Elizabeth R. Miner, *Secretary*.....Macomb

Tuesday Morning, May 16, 1933

10:00—12:00.

10:00—"The Care of the Indigent." R. K. Packard, Chicago. Discussion opened by Harold M. Camp, Monmouth.

10:30—"Discussion of Some of the Phases of Contract Practice." Olin West, Secretary and General Manager, American Medical Association, Chicago. Discussion opened by E. P. Coleman, Canton.

11:00—"Some of the Obstetrical Problems of the Country Doctor." E. E. Davis, Avon. Discussion opened by Louis N. Tate, Galesburg.

11:30—"Medical Leadership Among Lay Groups." Lena K. Sadler, Chicago.

11:55—Annual Election of Secretaries' Conference.

MEETINGS OF THE HOUSE OF DELEGATES

Tuesday Afternoon, May 16, 1933

3:00 P. M.—First meeting of the House of Delegates called to order by the President, John R. Neal, for reports of Officers, Members of the Council, Chairmen of Committees, introduction of resolutions, and for other business that may come before The House.

Thursday Morning, May 18, 1933

8:30 A. M.—Second meeting of the House of Delegates called to order by the President for the election of officers, councilors, committees, and delegates to the American Medical Association.

Reports of Resolutions Committee and necessary action on resolutions, and for the transaction of other business that may come before The House.

At the close of the second meeting of the House of Delegates, the President-Elect, Philip H. Kreuscher, will be inducted into the office of President, by the retiring President.

GENERAL SESSIONS

Tuesday Afternoon, May 16, 1933

1:00—Eighty-Third Annual Meeting of the Illinois State Medical Society officially opened by the President, John R. Neal.

1. Invocation—
2. Address of welcome, Mayor of Peoria.
3. Address of welcome—Hugh E. Cooper, President, Peoria Medical Society, Peoria.
4. Report of Chairman, Committee on Arrangements, C. G. Farnum, Peoria.
5. Announcements, and adjournment for Oration in Medicine.

2:00—Oration in Medicine. Charles B. Wright, Associate Professor of Medicine, University of Minnesota Medical School, Minneapolis.

Wednesday Morning, May 17, 1933

11:00—Oration in Surgery. H. S. Crossen,

Professor of Clinical Gynecology, Washington University School of Medicine, St. Louis.

Wednesday Afternoon, May 17, 1933

1:30—President's Address. John R. Neal, President, Illinois State Medical Society, Springfield.

President's Dinner

The Annual Dinner honoring the President of the Illinois State Medical Society will be held in the Ball Room of the Pere Marquette Hotel, at 6:30 P. M., Wednesday, May 17, 1933. This will be strictly a recreational dinner meeting, with suitable entertainment, and no speeches. The past presidents of the Society will be honored guests at the Dinner. Following the dinner, the President's Dance will be held in the Ball Room, with music furnished by a real orchestra. Those preferring to do so, may play bridge during the evening. Tickets for the President's Dinner may be procured from any member of the Committee on President's Dinner, or at the General Registration and Information Desk. It is hoped that every member present at the meeting will do their part in honoring the President by attending the Dinner.

Section Programs

section on medicine

Walter H. Nadler.....*Chairman*
R. F. Herndon.....*Secretary*

Tuesday Afternoon, May 16, 1933

3:00—"Mediastinal Tumor With Report of a Case." W. H. Newcomb, Jacksonville.

3:20—"Agranulocytosis." H. G. Hirschle, Canton.

Symposium on Arthritis

3:40—"Diagnosis of Non-Specific Chronic Arthritis." Douglas Boyd, Highland Park.

3:55—"General Treatment of Chronic Arthritis." Ary J. Arlon, Chicago.

4:10—"Diathermic Hyperpyrexia in the Treatment of Arthritis." D. E. Markson, Chicago.

4:25—"A Comparison of Methods of Producing Hyperpyrexia by Various Physical Agents; Demonstration of a Simple Method." J. R. Merrimen, Evanston.

4:40—"Indications for Lung Compression in Tuberculosis Based on a Pathological Clinical Classification." Benjamin Goldberg, Chicago.

5:10—"Multiple Myeloma With Report of a Case." G. B. Stericker, Springfield.

Wednesday Morning, May 17, 1933

8:30—"The Use of Amorphous Phosphorous in the Treatment of General Paresis." Sidney D. Wilgus and Ralph H. Kuhns, Mr. DeLester Sackett and Miss Phillis Quittman, Elgin.

8:50—"The Technic in the Administration of Various Agents for Production of Hyperpyrexia in the Treatment of General Paralysis of the Insane." (Motion Picture Demonstration). Alexander J. Azar, Elgin.

9:10—"The Use of Sodium Amytal in Myoclonic Encephalitis." F. Garm Norbury, Jacksonville.

9:30—"Meningococcus Meningitis; A Clinical Study of 338 Cases." Maxwell P. Borovsky, Chicago.

9:50—"Primary Hypochromic Anemia." Howard L. Alt, Chicago.

10:10—"Urinary Tract Anomalies and Pyuria in Chilhood." John A. Bigler, Highland Park.

10:30—"The Action of Chondroitin and Other Compounds of Gluouronic Acid With Especial Reference to Migraine." Lathan A. Crandall, Jr., Chicago.

Wednesday Afternoon, May 17, 1933

1:30—"President's Address." John R. Neal, President, Illinois State Medical Society, Springfield.

2:30—"Cirrhosis With Hemochromatosis." W. H. Nadler, Chairman, Section on Medicine, Chicago.

Symposium on Heart Disease

2:50—"Classification of Heart Disease." N. S. Davis, III, Chicago.

3:05—"Acute Infectious Myocarditis." James A. Walsh and James G. Carr, Evanston.

3:20—"Coronary Artery Sclerosis." Don C. Sutton, Chicago.

3:35—"Auricular Fibrillation." C. C. Maher, Chicago.

3:50—"Treatment of Heart Disease." William A. Brams, Chicago.

4:10—"Present Day Uses of Quinidine." Lewis W. Woodruff, Joliet.

4:30—"Chronic Prostatitis; Its Importance in General Practice." Clarence H. Boswell, Rockford.

4:50—"The Use of Alcohol in Medicine." Clarence Fischer, Peoria.

Thursday Morning, May 18, 1933

Joint Meeting with Sections on Surgery, Eye, Ear, Nose and Throat, Public Health and Hygiene, and Radiology.

8:30—12:00.

1.—"Radiologic Evidences of Diseases of the Biliary Tract." James T. Case, Chicago.

2.—"The Value of Combined Cholecystography and Liver Function Tests." Harold Swanberg, Quincy.

The successful therapy of a large percentage of gall bladder disease is surgery. Surgeons are frequently shocked to find their patient dead 24 or 48 hours after a simple cholecystectomy where no trouble was encountered at the time of operation. Such deaths invariably occur in patients with a poor liver function. The liver function can be fairly well determined by the intravenous injection of Iso-Iodeikon,—the same dye that is used for intravenous cholecystography. In making an x-ray examination of the gall bladder, why not use the intravenous method of cholecystography, which will not only enable us to determine the presence or absence of gall bladder pathology, but at the same time ascertain the operability of the patient?

3.—"The Etiology of Ocular Disease." Illustrated by lantern slides. Harry S. Gradle, Chicago.

4.—"Outlook for Public Health." Frank J. Jirka, Director, State Department of Public Health, Springfield.

5.—"The Public Health." John W. H. Pollard, Evanston.

6.—"The Management of Hepatic Diseases." Charles A. Elliott, Chicago.

7.—"A Gastric Subject." H. M. Richter, Chicago.

SECTION ON SURGERY

Sumner M. Miller.....*Chairman*
George W. Post.....*Secretary*

Tuesday Afternoon, May 16, 1933

3:00—"Complicated Fractures of the Leg, and Their Treatment." E. B. Montgomery, Quincy.

3:30—"Non-Surgical Treatment of Bladder Neck Obstruction." H. L. Kretschmer, Chicago.

4:00—"Trans-Urethral Resection of Bladder Neck Obstruction." B. C. Corbus, Chicago.

4:30—"Tumors of the Thyroid Gland." J. E. Bellas, Peoria.

5:00—"Surgery of the Thyroid in Children." W. L. Bowen, Peoria.

Wednesday Morning, May 17, 1933

8:30—"Paradural Anesthesia in Major Surgery." J. R. Harger, Chicago.

9:00—"Paget's Disease, or Osteitis Deformans." Jerome T. Jerome, Chicago.

9:30—"New Trends in Cancer Research." J. K. Narat, Chicago.

10:00—"Rectal Obstruction." H. M. Streicher, Chicago.

10:30—"The Delivery of the After Coming Head." Bertha Van Hoosen, Chicago.

11:00—"Oration in Surgery." "The Surgeon's Duty in Cancer of the Uterus." Harry M. Crossen, Professor of Clinical Gynecology, Washington University Medical School, St. Louis.

Wednesday Afternoon, May 17, 1933

1:30—"President's Address." John R. Neal, President, Illinois State Medical Society, Springfield.

2:30—"The Treatment of Pulmonary Abscess." Carl L. Hedblom, Chicago.

3:00—"Some of the Essentials in the Diagnosis and Treatment of Urgent Surgery of the Abdomen." E. S. Murphy, Dixon.

3:30—"Non-Surgical Abdominal Pain." Don Deal, Springfield.

4:00—"Intestinal Obstruction." W. R. Cubbins, Chicago. Amos Fey, Galesburg.

5:00—"Carcinoma of the Jejunum." R. A. Kordonat, Chicago.

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SECTION ON EYE, EAR, NOSE AND THROAT

Frank J. Novak, Jr.....*Chairman*
George S. Duntley.....*Secretary*

1.—Chairman's Address,—"The Immunologic Viewpoint in Our Specialty." Frank J. Novak, Jr., Chicago.

2.—"Physical Measures in the Treatment of Hypertrophic Rhinitis." A. R. Hollender, Chicago.

3.—"Ophthalmoscopic Findings in Hypertension Conditions." James E. Lebensohn, Chicago.

This paper illustrated by Fundus Photographs and the presentation of apparatus used in direct determination of blood pressure of the central retinal artery.

Discussion opened by G. F. Suker, Chicago.

4.—"The Value of Eradicating Tuberculosis of the Mastoid and Middle Ear." Irving Muskat, Chicago.

Discussion opened by John E. Mulsow, Milwaukee, Wisconsin. (By Invitation.)

5.—"The Choice of a Cataract Operation for Senile Cataract." Illustrated by Motion Pictures. Oscar B. Nugent, and W. A. Fisher, Chicago.

Discussion opened by G. F. Suker, Chicago.

6.—"Standards of Visual Blindness." A. L. Adams, Jacksonville.

7.—"Effects on Ciliated Nasal Epithelium of Various Solutions Used in Oto-Laryngology." Irving F. Barnett, Chicago.

8.—"Spontaneous and Traumatic Detachment of the Retina." C. F. Yerger, Chicago.

Discussion opened by Jos. F. Duane, Peoria.

9.—"Ocular Signs on Findings of Exophthalmic Goiter." Elias Selinger, Chicago.

Discussion opened by Leo M. Zimmerman, Chicago.

10.—"The Relation of the Endocrines to Ophthalmology." Louis Bothman, Chicago.

Discussion opened by Beulah Cushman, Chicago.

11.—"Ocular Findings in Tryparsemide Treatment of Syphilis." Leo L. Mayer, and R. Denton Smith, Chicago.

12.—"Pus in the Neck;—Surgical Approach." Hanby L. Ford, Champaign.

Discussion opened by A. B. Middleton, Pontiac.

(This program will be given Tuesday Afternoon, and Wednesday. Exact spacing to be given in Official Program.)

Thursday Morning, May 18, 1933

Joint Meeting with Sections on Medicine, Surgery, Public Health and Hygiene, and Radiology.

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7.—"A Gastric Subject." H. M. Richter, Chicago.

SECTION ON PUBLIC HEALTH AND HYGIENE

John W. H. Pollard.....*Chairman*
J. Howard Beard.....*Secretary*

Tuesday Afternoon, May 16, 1933

1.—"Cooperation Between the Health Department and the Local Physicians." Andy Hall, Mt. Vernon.

Discussion opened by W. R. Marshall, Clinton.

2.—"School Hygiene." Mr. F. L. Bacon, Principal, Evanstownship High School. Evanston.

Discussion opened by Mr. E. C. Fisher, Superintendent of Schools, Peoria.

3.—"Military Hygiene." Major A. P. Hitchins, M.C.U.S. Army, Fort Sheridan.

Discussion opened by Col. J. J. McKinley, Illinois National Guard, Hines—Lt. Col. A. B. Middleton, Pontiac.

4.—"Importance of Immunization in the Control of the Acute Contagious Diseases." H. S. Houston, State Department of Public Health, Springfield.

Discussion opened by C. George Appelle, Champaign.—W. M. Falbert, Decatur.

Wednesday, May 17, 1933

Symposium on Industrial Hygiene

1.—"Occupational Disease." M. Earl Brennan, East St. Louis.

Discussion opened by Wm. C. Nordholtz, Chicago.

2.—"Medical Organization in Industry." Don Deal, Springfield.

Discussion opened by E. A. Degenhardt, Chicago.

3.—"Health Engineering." Joel Connolly, Chicago Board of Health, Chicago.

Discussion opened by S. C. Beach, Chicago.

4.—"Laboratory Work in Industry." Lloyd Arnold, Chicago.

Discussion opened by Frank J. Smith, Chicago.

Thursday Morning, May 18, 1933

Joint Meeting with Sections on Medicine, Eye, Ear, Nose and Throat, Surgery, and Radiology.

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7.—"A Gastric Subject." H. M. Richter, Chicago.

SECTION ON RADIOLOGY

P. B. Goodwin.....*Chairman*
Robert A. Arens.....*Secretary*

Tuesday Afternoon, May 16, 1933

2:30 P. M.

1.—"Clinical Application of Excretion Urography." Norris J. Heckel, Chicago.

2.—"Pathology of the Urinary Bladder." H. J. Burstein, Decatur.

3.—"Urologist and Roentgenologist; Their Inter-relationship." Bradford Adelsberger, Peoria.

4.—"Value of Roentgenograms in Lesions of the Urinary Tract." Arthur Sprenger, Peoria.

Discussion of symposium opened by:

a—Herman L. Kretschmer, Chicago.

b—H. B. Henkel, Springfield.

c—F. Flynn, Decatur.

4:30 P. M.—"Fungus Infections of the Lung." Frank Deneen, Bloomington.

Discussion opened by M. Pollak, Peoria, and L. M. Hilt, Springfield.

Wednesday Morning, May 17, 1933

8:30—"Roentgenologic and Pathologic Diagnosis of Bone Tumors." M. A. Bernstein, Evanston.

Discussion opened by H. E. Cooper, and W. J. Roche, Peoria; and Walter Bain, Springfield.

9:00—"The Importance of Roentgenologic Examination of Growing Bones." Arthur Hawley Parmalee, Oak Park.

Discussion opened by Charles D. Stulick, Chicago; John R. Vonachen, Peoria; and Henry W. Grote, Bloomington.

9:30—"Roentgenology of Intracranial Tumors." Loyal Davis, Chicago.

Discussion opened by Emil Z. Levitin, Peoria, and F. W. Nickel, Eureka.

10:00—"Removal of Foreign Bodies in the Esophagus." (Method used thirty years ago.) C. U. Collins, Peoria.

"Present Methods of Removing Foreign Bodies." C. D. Sneller, Peoria.

11:00—"Oration in Medicine." Chas. B. Wright, Associate Professor of Medicine, University of Minnesota School of Medicine, Minneapolis.

Wednesday Afternoon, May 17, 1933

2:30—"Insurance Aspect of Roentgenologic Cardiology." Maximilian J. Hubeny, Chicago.

Discussion opened by R. E. Lee Gunning, Galesburg, and Harry A. Durkin, Peoria.

3:00—"Pneumoperitoneum and Surgery in Management of Abdominal Adhesions." Benjamin H. Orndoff, Chicago.

Discussion opened by Homer D. Junkins, Paris, and Arthur E. Perley, Quincy.

3:30 —

4:00—"The Proper Education and Registration of X-Ray Technicians." Gentz Perry, Evanston.

Discussion opened by James Archibald, Danville.

Thursday Morning, May 18, 1933

Joint Meeting with Sections on Medicine, Surgery, Eye, Ear, Nose and Throat, and Public Health and Hygiene.

8:30—12:00.

1.—"Radiologic Evidences of Diseases of the Biliary Tract." James T. Case, Chicago.

2.—"The Value of Combined Cholecystography and Liver Function Studies." Harold Swanberg, Quincy.

The successful therapy of a large percentage of gall bladder disease is surgery. Surgeons are frequently shocked to find their patient dead 24 or 48 hours after a simple cholecystectomy where no trouble was encountered at the time of operation. Such deaths invariably occur in patients with a poor liver function. The liver function can be fairly well determined by the intravenous injection of Iso-Iodeikon,—the same dye that is used for intravenous cholecystography. In making an x-ray examination of the gall bladder, why not use the intravenous method of cholecystography, which will not only enable us to determine the presence or absence of gall bladder pathology, but at the same time ascertain the operability of the patient?

3.—"The Etiology of Ocular Disease." Illustrated by lantern slides. Harry S. Gradle, Chicago.

4.—"Outlook for Public Health." Frank J. Jirka, Director, State Department of Public Health, Springfield.

5.—"The Public Health." John W. H. Pollard, Evanston.

6.—"The Management of Hepatic Disease." Charles A. Elliott, Chicago.

7.—"A Gastric Subject." H. M. Richter, Chicago.

DO YOU KNOW THAT—

Most births in general occur during the night; most twin births occur around mid-day.

The serologic paternity test can now eliminate every third man wrongly charged with being the father of a given child, whereas formerly only every sixth man could be eliminated.

Fourteen hundred, or about 35% of the physicians in Yugoslavia are employed in the health insurance societies in which only 7.1% of the general population are insured.

Carbon dioxide has been shown to lower intrapleural pressure and, therefore, to counteract the harmful effects of surgery on respiratory physiology.

Carefully controlled heat sterilization is the only uniformerly reliable and positive method of sterilizing surgical catgut sutures.

In dogs with pulmonary tuberculosis (human type), the atelectatic lobes produced by the occlusion of large bronchi with silver nitrate, show few or no tubercles.

WAYNE COUNTY BULLETIN.

EXHIBITORS AT THE 1933 ANNUAL MEETING

Abbott Laboratories, North Chicago.

A. S. Aloe Company, St. Louis.

DePuy Manufacturing Company, Warsaw, Indiana.

R. B. Davis Company, New York City.

General Food Sales Company, New York City.

Gerber Products Division, Freemont Canning Company, Freemont, Michigan.

G. F. Harvey Company, Peoria.

Horlick's Malted Milk Corporation, Racine, Wisconsin.

Kellogg Company, Battle Creek.

J. B. Lippincott Company, Philadelphia.

Mead Johnson Company, Evansville, Indiana.

The Medical Protective Company, Chicago.

Mellin's Food Company, Boston.

Sharp & Smith, Chicago.

Sutliff & Case Company, Peoria.

Universal Products Corporation, Pottstown, Pa.

Commercial Art Press, Monmouth, Illinois.

American Medical Association, Chicago.

American Society For The Control of Cancer, New York City.

American Social Hygiene Association, New York City.

Illinois Department of Public Health, Springfield.

Illinois Tuberculosis Association, Springfield.

Milton Bohrod, Fresh Pathologic Tissue Demonstration, Peoria.

Illinois State Medical Society, Section on Radiology.

Educational Committee, Illinois State Medical Society.

Groves B. Smith, Beverly Farm Inc., Godfrey.

Harold Swanberg and Arthur E. Perley, Quincy.

West Suburban Hospital, Oak Park.

Ravenswood Hospital, Chicago.

Chicago Society of Allergy, Chicago.

E. L. King, Radiologic Supplies, Peoria.

Cook County Graduate School of Medicine, Chicago.

(This list of exhibitors is incomplete, and will be given in full, in May JOURNAL.)

NOTES ON EXHIBITS

The American Medical Association exhibit will show the Members of the Association what is being done for them, as well as for the Public at large in the way of affording additional protection against fraudulent representations.

Hospital exhibit showing the work of the Council on Medical Education and Hospitals of the A.M.A. Mechanical apparatus, maps and charts will show the hospital situation in Illinois and the country at large.

Health education exhibit showing the work of the Bureau of Health and Public Instruction of the A.M.A. Mechanical apparatus, maps and charts will show the radio activities of the Bureau with health education material that the physician can use for public addresses to schools, clubs and other similar gatherings.

Physical Therapy exhibit, showing the work of the Council on Physical Therapy of the A.M.A. Charts and posters will depict the advantages and disadvantages of certain forms of physical therapy.

Tularemia exhibit from the Central Scientific Exhibit of the A.M.A. An exhibit prepared by Edward Francis, which received a gold medal in the Scientific Exhibit of the A.M.A., now installed in the Central Scientific Exhibit at the American Medical Association.

The Surgeon's "X-L-LYTE" displayed by the Universal Products Corporation, of Pottstown, Pa., will meet with the approval of all physicians, as it is a compact, electric diagnostic set, at low cost, contained in a neat, leather zipper case. This unique inexpensive diagnostic light has an otoscope, tonsil pillar retractor, tongue depressor, nasal speculum, and magnifying lens, and is also well adapted for transillumination. See this interesting diagnostic case, and you will want one.

Sutliff & Case Company, Peoria, will have an interesting display of their products, with some of the more popular, and newer specialties for the man in practice. They will also have surgical instruments, supplies, and a general line of accessories which will be of interest to the physicians attending the meeting. A cordial invitation is also extended to all members and guests of the Society to visit their large Peoria store while in the City.

The G. F. Harvey Company of Saratoga Springs, New York, and Peoria, will display many of their special pharmaceutical products. A generous supply of samples of their specialties will be available to those who desire them. A cordial invitation is extended to all visitors to visit their Peoria office and stock rooms.

Sharp and Smith, the old reliable Chicago surgical supply house will again present to the medical profession of Illinois a complete line of surgical and hospital supplies suitable for their selection, regardless of the particular line in which they may be interested. Specialists as well as general physicians may find many articles of interest at the exhibit which will be well worth a few moments of their time. Mr. Frazin, known throughout the State by those physicians who visit in Chicago, will be at the exhibit to look after your wants.

The American Social Hygiene Association of New York City, will present a most interesting exhibit on Congenital, and Cardio-Vascular Syphilis. These exhibits have received the Special Certificate of Merit, in their class, of the American Medical Association.

A representative from the office of the Association will be present to give these demonstrations.

Four Departments of the West Suburban Hospital, of Oak Park, will be represented in their unusual exhibit.

Dr. E. C. Piette,—Demonstration of specimens of general pathology and of some rare tumors.

Dr. Homer Humiston,—Specimens of Urologic pathology and use of resectoscope.

Dr. W. J. Potts,—Demonstration on Fractures; wire traction outfit; and walking cast.

Dr. W. R. Williams,—Corrosion preparations of heart and lung, particularly with regard to collapse therapy.

Horlick's Malted Milk Corporation, in booth No. 24, will exhibit the original malted milk and Horlick's Malted Milk Tablets, both products in natural and chocolate flavors. Recent experiments have shown that the regular use of Horlick's not only definitely

improves the appetite, but also builds strength and resistance to colds, and other diseases. Also Horlick's Maltose and Dextrin milk modifier will be displayed, which has achieved marked success in infant feeding.

The DePuy Manufacturing Company of Warsaw, Indiana, exhibit in booth No. 8, a new rocking leg splint, which eliminates bed pan trouble. No weights—chromium plated—rests on any bed. Used for treatment of femur, lower leg fractures and gunshot wounds.

The idea in constructing this splint was to make reduction easy for the surgeon, traction simple and greater comfort for the patient. Satisfied patients hasten recovery and insure better results. Come in and see us as you are always welcome. "Red" Bates will be there to serve you.

The Abbott Laboratories Exhibit will feature concentrated vitamins, with Haliver Oil as an outstanding product.

Medical science of today recognizes the importance of a high vitamin diet and these concentrated products should not be considered as another fad, but as something that must be studied seriously by every physician. The Abbott representatives will discuss the scientific background.

Dr. Groves B. Smith, Superintendent of the Beverly Farm Home and School for Backward Children, will demonstrate mental abilities of the varying grades of mental deficiency as illustrated by a moving picture demonstration of the practical application of the training of these various levels, a demonstration of the finished products that have been carried out by these individuals.

The idea is to bring to the physicians a better recognition of the types of mental deficiency and the types of training which can be given to each particular type of individual.

E. L. King, Central Illinois representative of Dick-X-Ray Company, St. Louis, is exhibiting X-ray illumination. 4,000 milliampere radiograms, X-ray tubes and electrocardiograph will be shown in the exhibit.

"Sanka Coffee is real coffee of rare excellence and has been accepted by the Committee on Foods of the American Medical Association with the statement 'is free from caffeine effect and can be used when other coffee is forbidden.'

"Sanka Coffee is decaffeinated before the coffee beans are roasted which leaves intact all its mellow flavor and fragrance. It is so rich and satisfying in flavor that the patient never craves caffeine-containing coffee."

Visit booth No. 54 and taste for yourself the deliciousness of Sanka Coffee.

The Exhibit of the American Society for the Control of Cancer will show the Canti film of living normal and malignant tissue and the effect of radium emanation on these tissues. There will be moulages of breast cancer of different types and photographs of the method of transillumination of breasts. Charts will be shown of cancer mortality and morbidity distribution by counties in Illinois and in the United States as a whole. There will be literature available both for the profession and for the laity.

Drs. Harold Swanberg and Arthur E. Perley, Quincy, Illinois, will feature in their exhibit "Roentgen Diagnosis." They will show by reductions made from Roentgenograms, the wide application of X-ray diagnosis in the present day practice of Medicine. Interesting roentgenograms of foreign bodies, bone pathology, joint disease, fractures, dislocations, bursae, heart disease, pulmonary pathology, gastrointestinal tract, gall bladder, genito-urinary tract, pregnancy, teeth, sinuses, mastoids, etc., will be shown.

It is the desire to show in this exhibit some of the practical every day applications of the X-ray in modern medical diagnosis, especially to the general practitioner.

A. S. Aloe Company, St. Louis, will exhibit an interesting line of modern surgical instruments, supplies for the specialist, as well as the man in general practice, and will have many things which will be of interest to all visitors at the meeting. Representatives of this well known firm will be present, to greet their friends, and show how they have kept up with Modern Medical and Surgical Progress.

All members of the Illinois State Medical Society and their friends are cordially invited to visit booth No. 38 of the Medical Protective Company. Mr. M. L. Allen, of the Peoria office will be delighted to have you call, whether merely to say "hello" and renew old acquaintances or to satisfy yourself on some questions of mal-practice protection. Consider him at your service and feel free to call upon him for anything which may contribute to making this the most pleasant and successful Society Meeting you have ever attended.

Mead Johnson and Company, Evansville, Indiana, has on exhibit its complete line of infant diet materials including Dextri-Maltose—Meads Newfoundland Plain or Flavored Cod Liver Oil—Meads Viosterol—Meads 10 D Cod Liver Oil—Meads (A-D) Viosterol in Halibut Liver Oil 250 D—Meads Undiluted Halibut Liver Oil—Meads Brewers Yeast Tablets—Meads Cereal-Sobee-Florena or Sunshine Flour—Meads Dry Malt Soup Stock—Meads Powdered Whole Milk-Alacta-Recolac-Casec—Meads Mineral Mixture No. 85.

There will be also for the examination of physicians a complete line of Mead's services such as diets for older children—Height and weight charts, etc., all of which are free to members of the Medical Profession in any quantity desired.

Representatives will be on hand to meet their friends and to discuss the application of any of the Mead products to infant feeding problems.

In the Kellogg Booth at the Meeting of the Illinois State Medical Society, there will be an interesting display comparing the value of All-Bran with other commonly used foods in iron and Vitamin B content.

Kaffee Hag Coffee and All-Bran cookies will be served at the booth to visitors. Miss Florence Cooley of the Home Economics Department, Kellogg Company, Battle Creek, Michigan, will be in charge of the exhibit.

The new Gerber product, Cereal, cooked in milk and strained, ready for feeding, will be on display at the Gerber Booth, No. 31. This food is intended as the first semi-solid food for infants. A combination of whole wheat cereals with added wheat germ is cooked in whole milk and then strained so as to retain the nutrients of the whole grains. The resulting product is such a

fineness that clinical trials have been made with infants of four and five weeks of age, who have been difficult feeding cases, with good results.

Information and a display of all Gerber products, Cereal, Vegetables and Prunes, and copies of publications are at the booth and available to you.

Visiting physicians and their friends are invited to stop at the booth occupied by R. B. Davis Company, where they may secure full information relative to Cocomalt.

Cocomalt is a scientific food concentrate in powder form. It is a delicious food drink composed of natural food ingredients in correctly balanced proportion to provide essential elements required for the well-being of the body. Cocomalt is prescribed and used by physicians in their private, hospital and clinical practice with a very high degree of success.

Cocomalt will be served either hot or cold to all persons in attendance so that they may judge as to "its quality and flavor."

The booth is in charge of representatives who will be pleased to answer questions concerning Cocomalt.

Dr. Milton Bohrod, Peoria pathologist, will give daily demonstrations of fresh pathologic tissue, which will be of interest to all physicians attending the meeting. This method of displaying interesting pathologic lesions, at medical meetings, has been increasing in popularity the past few years, and it is the desire of Dr. Bohrod to demonstrate pathologic lesions of general interest to all physicians at the meeting.

J. B. Lippincott Company will feature the Every Day Practice Series, edited by Harlow Brooks, consisting of monographs on important every day subjects by eminent writers, the binding of these volumes is a reproduction of a celebrated hand-tooled leather binding of 1499. They will also display the new Practical Fractures by Magnuson, the new Fuchs' Diseases of The Eye, translated by E. V. L. Brown; the new Operative Surgery by Kirschner, translated by Ravdin of the University of Pennsylvania, familiarly known as the Color Surgery; Children's Tonsils, In or Out? by Kaiser; Surgical Errors and Safeguards, by Thorek; and Tumors of the Breast by Cheatle and Cutler.

The Mellin's Food Company, Boston, will display their well known products, showing the source, nature and amount of food elements that enter into the making of Mellin's Food, the composition of the finished product, the caloric value of various quantities by weight and by measure, and what Mellin's Food accomplishes as a modifier of milk in the feeding of infants and adults.

All physicians are cordially invited to visit this exhibit, to ask questions and to offer suggestions that will lead to a thorough understanding of Mellin's Food, and its purpose.

The Commercial Art Press, Monmouth, Illinois, high class printers, will have an interesting display of several grades of printing for physicians which will be suitable to your special requirements. If you want physicians' stationery, prescription blanks, general office supplies, files, or special "set-ups," tell them what you want and get their prices which will be a surprise to you, and will fit your pocket-book.

The Illinois State Department of Public Health will have an interesting exhibit, showing a motion picture film and the proper method of taking specimens for diagnostic laboratory examinations and giving reasons why specimens should be taken in the way recommended. It is the idea of the Department that this picture should be shown several times a day in some area of the space available for exhibits. In addition to the film mentioned above, the Department has three other motion picture films that deal with laboratory procedures and laboratory services.

The Department will also exhibit four charts that relate to the trends in mortality from the principal causes of death in this State.

It is believed that these charts would be of some interest to the medical profession.

The Illinois Tuberculosis Association will have an exhibit showing efforts made in Illinois to combat Tuberculosis.

A complete synopsis of this exhibit will be given in the May JOURNAL.

There will be many other scientific and commercial exhibits, and complete details will be announced in the Official Program.

LABEL BORIC ACID SOLUTIONS POISON

The recent deaths of three infants by the accidental use of boric acid in a New York Hospital recalls six similar accidents in a Chicago Hospital in 1927 (McNally, W. D., and Rust, C. A.: The Distribution of Boric Acid in Human Organs in Six Deaths Due to Boric Acid Poisoning, *The Journal*, Feb. 4, 1928, p. 382). All these accidents occurred as the result of administering a solution of boric acid for water or saline solutions. The use of boric acid and its salts in the medical profession and in some of the economic lay industries has made them commonplace—so much so, in fact, that their power for harm through overdosage or accidental consumption has receded to the background until ordinary precaution, at times, is not used in administering these substances. The potential danger of boric acid poisoning is sufficiently great to make it imperative that all containers of solutions of boric acid in hospitals be distinctly labeled POISON, so that there will not be a repetition of this type of poisoning.

HOW TO KEEP FROM GROWING OLD

Always race with locomotives to crossings; engineers like it. Always pass the car ahead on curves or turns. Don't use your horn, it may unnerve the other fellow and cause him to turn out too far. Demand half of the road —the middle half. Insist on your rights. Always speed; it shows people you are a man of pep even though an amateur driver. Never stop, look and listen at railroad crossings; it conserves time. Drive confidently, just as if there were not eighteen million other cars in service. Always lock your brakes when skidding. It makes the job more artistic. Always pass cars on hills. It shows you have more power, and you can turn out if you meet a car at the top.—"Some Talk."

AUXILIARY NEWS—MARCH

The Woman's Auxiliary to the Chicago Medical Society have an exceptional announcement—

The Auxiliary will have a booth in the hall of science at the Century of Progress Fair. Members of the Cook County Auxiliaries will act as hostesses to all visiting auxiliary members and physicians' wives. The Chicago hostesses will act as a bureau of information as to the shopping district, hotels, transportation, points of interest in and around Chicago and will be happy to furnish information as to the objects of the Auxiliary. Auxiliary members and all physicians' wives throughout the country will receive a hearty and helpful welcome when they visit the space of the Chicago Auxiliary. Naturally all visitors from Illinois will receive extra special attention. Will all who are planning to come to the Fair please make a note to visit this booth in the Hall of Science.

Mrs. A. H. Brumback, President of Cook County Auxiliary, planned a Tour of the Century of Progress Fair grounds and buildings on March 22, 1933. The members of the five branch auxiliaries in Chicago were invited and 88 interested and enthusiastic women made up the group. The highlights of the tour were—Hall of Science, Temple of Jehol, Lincoln Group, Ft. Dearborn, Travel and Transportation, with luncheon at "Old Heidelberg" restaurant. With all these beautiful buildings and marvelously interesting exhibits it is hoped that many physicians' wives will find it possible to visit the Chicago Fair.

On March 18 in Chicago at the Stevens Hotel, the Board Members of the Illinois State Auxiliary met in an all day session under the leadership of its president, Mrs. E. W. Mueller. This was indeed a very successful board meeting, with 22 present, and the reports from officers, chairmen of committees, and councilors indicated clearly the advancement of auxiliary activities and the fine progress of this work in the State of Illinois.

The Chicago board members acted as hostesses to the out of town members at luncheon.

All Board Members are looking forward to a very successful Annual Meeting in Peoria May 16, 17 and 18th.

Mrs. F. P. Hammond, Chairman
Press and Publicity Committee

CONTINUATION OF ANNUAL REPORTS 1931-32

Organization Committee

Early in the year I wrote a letter to each Councilor giving her a list of the counties in her District. Following the plan suggested by the National Organization Chairman, I suggested ways by which Councilors might get in touch with those eligible for membership in the several counties.

I asked Councilors to report any organization activities to me, and offered my assistance in follow-up work in so far as I was able to give it.

In one County where some interest was shown and whose district was without a Councilor, I wrote to the Councilor representing counties nearby and asked her co-operation in trying to form an auxiliary in the adjacent county.

In a county in the First District, I followed up a request that an auxiliary be formed in that county, only to find that the County Medical Society in a regular meeting had voted not to sanction the forming of an auxiliary.

In the Fourth District I inquired why two auxiliaries had withdrawn from the State organization. The Councilor for this District may be able to interest these counties in re-organizing.

A county in the Sixth District reported having had organization before the State Auxiliary was organized but it had been short-lived through insufficient interest. A Councilor located in that district may be able to find some avenue of approach.

During the annual meeting last year in East St. Louis I met with a group of St. Clair County physicians' wives and assisted in forming a temporary organization which was perfected during the summer.

The reports of various Councilors will show that much effort has been put forth which will surely bring results in the near future.

Mrs. W. D. Chapman

Press and Publicity Committee

In following the instructions and wishes of our President and Board, and the duties outlined by the National Auxiliary I submit the following resume of this Committee's work during the past year:

1. Attended every Board Meeting and submitted a written report.
2. Established contact with the National Chairman of Press & Publicity, and have sent to her items relating to activities in the State of Illinois on five different occasions.
3. Established contact with all County Press & Publicity Chairmen asking them to send in news items, also newspaper clippings pertaining to their local auxiliary.
4. Established contact with Chairmen of Committees asking for an outline of their work for purpose of publicity.
5. Established contact with Dr. C. J. Whalen, Editor of the ILLINOIS MEDICAL JOURNAL, and have sent to him monthly items of interest from all counties reporting news. Dr. Whalen has given us splendid co-operation and I wrote a letter of appreciation to him for his excellent support.
6. I have sent to Regional Press & Publicity Chairman of National Auxiliary our record book of clippings and press notices, which book was placed on exhibit at the National Convention in New Orleans.
7. Sent to local newspapers notices of Board Meetings in Chicago.
8. Maintained a file of all data from National Press & Publicity Chairmen, using such parts as might be applicable to the Illinois auxiliary.
9. Have kept a complete and systematic record book of all newspaper notices throughout the State, as well as other interesting data.
10. As a complete and permanent record of all press notices, articles edited for the State Medical Journal, etc., I submit with this report Record Book of accomplishments of this Committee.

Appreciation is extended to the Chairmen of Committees and County Press & Publicity Chairmen who have co-operated with me this past year.

Mrs. Frank P. Hammond

Printing Committee

Chairman, Mrs. R. K. Packard

Report on expenditures for printing contained in Treasurer's Report.

Convention Committee

Chairman, Mrs. H. B. Henkel

Complete program and details of Convention at Springfield published in May 1932 issue of The Journal.

Public Relations Committee

In the early part of the Auxiliary year letters recommending the appointment of a Public Relations Chairman was sent to all County Presidents and County Secretaries. Later another letter was sent to those counties which did not respond to the first request.

Replies have been received from eight counties, seven of which have appointed a Public Relations Chairman, i. e., Douglas, Cook, Coles-Cumberland, Will-Grundy, St. Clair, Rock Island and Vermilion. In Randolph County this work is being carried on by the President. She reports many contacts with other organizations. As soon as possible a Chairman will be appointed.

This committee sent a mimeographed leaflet called "Suggestions for Public Relations Chairmen" to all County Presidents, Secretaries and Public Relations Chairmen, as well as to the Branch Presidents and Secretaries of the Cook County Auxiliary. Letters have been received stating that same were helpful and that the "Suggestions" were being carried out.

Many counties have had open meetings at which time a special invitation was sent to Club Presidents and a general invitation extended to Club members. Talks on Anti-Vivisection, quack remedies and legislation have been heard. At one meeting the Canti film was shown and a talk explaining same was given. Speakers have been recommended for lay organizations and many valuable contacts have been made with other organizations. Letters of protest have been sent to Publishing Companies whose publications have contained articles which tended to destroy confidence in the medical profession. One member of the Auxiliary was responsible for the removal of a certain publication from several magazine stands which magazine contained an article that was extremely detrimental to the Medical profession.

We must continue to urge our members to join as many other organizations as possible. We must also urge that they become active in various committees and offices in order that we may better assist in directing the policies as well as the health activities of these organizations. We should urge our husbands to do the same.

We urge that every county have a Public Relations Chairman and that next year each Chairman keep a detailed account of her work to be sent to the State Chairman at the end of the year so that it may be embodied in her annual report.

Mrs. G. Henry Mundt

Credentials and Registration Committee

May 18, 1932

Number of Officers registered, 5; Number of Councilors registered, 5; Number of Chairmen of Standing Committees, 8; Number of Delegates, 17; Number of Alternates, 3.

Mrs. Lucius Cole

Legislative Committee

Upon appointment as chairman of this Committee I realized my first duty was to counsel with Dr. J. R. Neal, Chairman of the Legislative Committee of the Illinois State Medical Society, and with Dr. W. C. Woodward, Director of Legal Medicine and Legislation of the American Medical Association.

The whole-hearted cooperation of these physicians was cheerfully given. I incorporated their ideas and plans in a letter which was indorsed by our State President, Mrs. T. O. Freeman, and sent to each County Auxiliary in November.

In my local auxiliary we gave a legislative program. Dr. French of Decatur spoke on "Medical Economics." The meeting was well attended showing that especial interest was aroused.

Upon the advice of the Advisory Council the Executive Board of the Woman's Auxiliary to the Vermilion County Medical Society in February wrote to each representative and senator in Washington protesting against House Bill 7425 and gave the reasons why it should be defeated. The majority of the members of Congress answered our letters thanking us for our interest.

Mrs. H. I. Conn of Douglas County Auxiliary sent in an interesting report on legislative activities. Mrs. Conn stated that following a program on smallpox their society sent a letter to Dr. Andy Hall pledging their support to make vaccination compulsory.

Another program was devoted to the Jones Bill. A letter was sent to the two senators and the two congressmen at large from Illinois and to Representative Charles Adkins, stating the attitude of the Woman's Auxiliary regarding this Bill.

I wish I might report that every County Auxiliary had given a good constructive program on Legislation. No doubt some have for after sending my letter in November I received replies thanking me for my assistance and stating they were planning to use some of the material.

That we may be aroused and alert to the part we may have in getting better medical legislation and that the Auxiliary will seek to learn how to do this, is the desire of this Committee.

Mrs. Solomon Jones

Program Committee

The program for this past year has been education and has been approved by our Councilors. Our President, Mrs. T. O. Freeman, felt the need of stressing certain phases of auxiliary work and the topics have been chosen with this idea in mind.

Illinois' record for smallpox and lack of any state law for compulsory vaccination led us to choose this timely topic for the first meeting of the year. Many women's clubs and organizations, particularly Parent-Teachers and League of Women Voters, are doing much harm to the medical profession by suggesting and endorsing and even campaigning for passage of such bills as the Sheppard-Towner Act. In order that doctors' wives may present in intelligent and comprehensive manner their views of such legislation, our program recommends that we read our Illinois Medical Journal and also the Journal of the A. M. A.

We have asked all auxiliary members to read Hygeia, and to ask teachers and children to use it in schools and to have it placed in public libraries and homes. The printed message is very effective and surely something is necessary to combat such articles as are reviewed and listed in the "Survey of Popular Magazine Articles" which discuss medical subjects. Fakes, quacks, and misguided enthusiasts abound.

"Some Economic Aspects of the Practice of Medicine" as discussed in both our own State Medical Journal and in the National Magazine, is a most vital topic not only for the doctor, but for all the people. The doctors' business has not escaped the ill effects of the present economic unrest. This idea of something for nothing is well illustrated in the demand made by Parent-Teachers and some other organizations for free examination of school children and for free clinics and health centers. Child welfare work has come to be a hobby with many clubs and their zeal is all out of proportion to their knowledge. Also, their energies are mostly expended in getting the doctors to do the work and they take the glory while the doctor doesn't even get that. "Child Welfare and the Examination of School Children" offers many helpful suggestions.

"Books Written by Doctors and about Doctors" has been added to give the human side of the Physician. Too often this is forgotten by the patient.

One topic was sent each month to the county presidents in the state with a letter of suggestions and a list of references. We trust that these have at least been helpful.

Mrs. N. C. Iknayan

Revisions Committee
Chairman, Mrs. Harold Miller

A complete record of the splendid work done by this Committee is found in the revised copy of the Constitution and By Laws of the Woman's Auxiliary to the Illinois State Medical Society.

ANNUAL MEETING OF AMERICAN ASSOCIATION FOR THE STUDY OF GOITER

American Association for the study of goiter will hold its next meeting at Memphis, Tennessee, May 15, 16, 17, 1933. The headquarters will be at the Peabody Hotel. Preliminary program is as follows:

May 15, 1933

8:00 to 10.00 A. M.—Hospital Clinics.

10:00 to 12:00 M.—Diagnostic Clinic—Dr. R. S. Dinsmore, Cleveland, presiding.

Discussion: Dr. H. J. Vandenberg, Grand Rapids, Mich., Dr. J. A. Crisler, Sr., Memphis, Tenn., Dr. A. G. Brenizer, Charlotte, N. C., Dr. A. G. Payne, Greenville, Miss.

Lunch

Dr. George E. Beilby, Albany, N. Y.
"Exophthalmic Goiter in Children"

Dr. O. W. Thompson, Chicago
"The Iodine in the Thyroid Gland"

Dr. C. Alexander Hellwig, Wichita, Kansas
"Morphogeographic and Experimental Studies in the Etiology of Goiter"

Dr. Harold L. Foss, Danville, Pa.
"When Is a Goiter Toxic"

Dr. John deJ. Pemberton and Dr. J. M. McCaughan, Rochester, Minn.
"Hemi-Aplasia of the Thyroid Gland: A Review of the Literature and Report of Five Cases"

Dr. William Weston, Columbia, S. C.
"Studies in the Prevention of Goiter"

Dr. A. G. McGhie, Hamilton, Ontario
(Title not yet received)

Dr. C. H. Mayo, Rochester, Minn.
"Thyroid Deficiency a Commonly Unrecognized Disorder"

S. D. Van Meter, M. D., Chairman, Denver, Colorado.

Evening Meeting

Presidential Address — Dr. Henry S. Plummer, Rochester, Minn.

May 16, 1933

8:00 to 10.00 A. M.—Hospital Clinics.

10:00 to 12:00 M.—Diagnostic Clinic—Dr. W. D. Haggard, Nashville, Tenn., presiding.

Discussion: Dr. Irwin Abell, Louisville, Ky., Dr. W. C. Chaney, Memphis, Tenn., Dr. Robert Austin, Dayton, Ohio, Dr. W. H. Parsons, Vicksburg, Miss.

Lunch

Dr. Richard B. Cattell, Boston
"Diseases of the Thyroid in Children"

Dr. Willard Bartlett, St. Louis
"The Rehabilitation of the Toxic Goiter Patient Viewed in a New Light"

Dr. Frederick A. Coller and Dr. Walter G. Maddock, Ann Arbor, Mich.
"Water Balance of Patients with Hyperthyroidism"

Dr. Arthur E. Hertzler, Halstead, Kans.
"Indications and Technic for Complete Thyroidectomies"

Dr. Charles H. Frazier, Philadelphia
"Carbohydrate Metabolism in Its Relation to Hyperthyroidism: A Continuation Study"

Dr. Benjamin Markowitz, Bloomington, Ill.
"The Life Cycle of the Thyroid Cell and Its Relation to Goiter"

Dr. Martin Nordland, Minneapolis
"Advantages and Technique of Preliminary Hemostasis in Thryoidectomy"

Dr. James A. Lehman, Philadelphia
"Hyperthyroidism Complicating Pregnancy"

Garden Party

Evening
Banquet

May 17, 1933

8:00 to 10.00 A. M.—Hospital Clinics.

10:00 to 12:00 M.—Diagnostic Clinic—Dr. M. O. Shivers, Colorado Springs, presiding. "Patients Without Classical Symptoms"

Discussion: Dr. E. P. Sloan, Bloomington, Ill., Dr. J. K. McGregor, Hamilton, Ont., Dr. H. C. Schmeisser, Memphis, Tenn., Dr. E. R. Arn, Dayton, Ohio.

Lunch

Dr. Shelby W. Wishart, Evansville, Ind.
"The Use of Digitalis Preparations in Thyrotoxicosis"
Dr. Donald Guthrie, Sayre, Pa.
(Title not yet received)
Dr. Emil Goetsch, Brooklyn, N. Y.
(Title not yet received)
Dr. Andre Crotti, Columbus, Ohio
"The Thyrotoxic Goiter Problem and the Autonomic"
Dr. H. H. Searls and Dr. Wallace I. Terry, San Francisco
"Further Obervations on Parathyroid Protection"
Dr. James A. Hill, Houston, Texas
(Title not yet received)
Dr. S. J. Waterworth, Clearfield, Pa.
(Title not yet received)
Dr. Geo. W. Crile, Cleveland, Ohio
Address

Members of the profession in good standing are cordially invited to attend this meeting. They are also urged to join a special group sailing from New York City, July 26th, to attend the *International Goiter* Conference to be held in Berne, Switzerland, August 10-11-12th. Special rates have been provided and daily programs arranged while en route to Le Havre. Those who are interested should communicate with J. R. Yung, M. D., Corresponding Secretary, Terre Haute, Ind., or S. D. Van Meter, M. D., Chairman, Denver, Colorado.

Medical Women's Day at the Illinois State Medical Society

May 16, 1933

Pere Marquette Hotel, Peoria

Morning Session, 10:00 A. M.

Marion K. Bowles, M.D., Joliet—Presiding

Presentation—John R. Neal, M.D., Springfield—President, Illinois State Medical Society.

Lay Group Outlines for Public Health Work—

Illinois Federation of Women's Clubs, Lena K. Sadler, M.D., Chicago—State Chairman.

Illinois Congress of Parents and Teachers, Mrs. C. W. Balch, Chicago—State Chairman.

A Medical Society and Its Service to the Public—Miss Jean McArthur, Chicago, Secretary Educational Committee, Illinois State Medical Society.

How the Public Health Nurse Works With the Profession—Miss Louise Nicol, State Department of Public Health, Peoria.

Afternoon Session, 3:00 to 5:00 P. M.

2:00 o'clock — GENERAL OPENING MEETING.

3:00 o'clock—Harriett M. Daniel Graves, M.D., Murphysboro—Presiding.

Teaching the Lay Audience Diphtheria Immunization—Elizabeth D. Ball, M.D., State Department of Public Health, Springfield.

Opportunities in Preventive Medicine for the Woman Doctor as Seen by a State Health Officer—Grace S. Wightman, M.D., Chief, Child Hygiene Division, State Department of Health.

What I Would Tell Lay Audiences Regarding Prenatal Care—Esther Smucker, M.D., Tiskilwa.

Health Audits—Alice Conklin, M.D., Chicago.

Teaching Sex Hygiene to Children in the Home—Mabel Howe Otis, Moline.

Social Diseases—Caroline MacDonald, M.D., Chicago.

Round Table Discussion. Outlines and addresses to be distributed.

Evening Session, 8:00 P. M.

Margaret B. Meloy, M.D., Peoria—Presiding

Century of Progress in Health—Bertha Van Hoosen, M.D., Chicago.

My Experiences With Women's Clubs—Harriet Day Chandler, M.D., Decatur.

Mental Hygiene—Lena K. Sadler, M.D., Chicago.

HOTEL RESERVATIONS

Hotel Pere Marquette has been selected as headquarters for the Illinois State Medical Society Meeting, May 16, 17 and 18.

Reservations may be made direct with the hotel or through Dr. W. A. Malcolm, 920-30 Peoria Life Bldg., Peoria, Illinois. There will be no increase in rates, the regular rates as posted in each room prevailing. These rates are as follows:

Rooms with large double bed: $3.00, $3.50, $4.00 and $4.50 for one person. $1.00 additional to the single rate for double occupancy.

Rooms with twin beds: $6.00, $7.00 and $8.00 per day.

All rooms have private bath in connection.

A large number of advance reservations have already been received and it is suggested that those who have not already made reservation do so at the earliest possible moment.

FOCAL LESIONS OF SPINAL CORD DUE TO THE BEGINNING OF THE WORLD

A modest Scotchman, in speaking of his family, said: "The Douglas family is a verra, verra auld Scotch family. The line rins awa' back into antiquity. We dinna ken hoo far back it rins, but it's a lang, lang way back, and the history of the Douglas family is recorded in five volumes. In about the middle of the third volume, in a marginal note, we read, 'Aboot this time the warld was created.' "—New Outlook.

ALUMNI CLINICS

The Alumni Clinics in connection with the Fiftieth Anniversary of the founding of the College of Physicians and Surgeons, now the College of Medicine of the University of Illinois, will be given on Wednesday morning and afternoon, June 7, and Thursday morning, June 8. A buffet luncheon will be served on both days.

The Clinics will cover live subjects, which the practitioner meets daily. These will be illustrated by a large amount of clinical material, moving pictures and laboratory procedures. A part of each morning will be devoted to technical and operative demonstration. At this time an opportunity will be furnished for individual conferences and first-hand discussion of difficult problems. The new medical and dental laboratories will be open for inspection. The staffs of the pre-clinical departments will be on hand to conduct visitors through the laboratories and to make demonstrations of equipment as desired. Among the subjects presented at the clinics will be the surgery of pulmonary tuberculosis, eclamptogenic toxemia and studies in infant feeding. A large number of cases of hemophilia will be demonstrated. These cases are being used in the comprehensive study of this condition. The details of the program will be announced later.

The College of Medicine of the University of Illinois extends a cordial invitation to the medical profession to attend these clinics.

The Memorial Address, in memory of the alumni who made the supreme sacrifice during the World War will be delivered at the College, Thursday, June 8, at 2 p.m. This will be followed by a business meeting of the Alumni Association.

The Annual Alumni and Faculty dinner tendered to the fourth year class and commemorating the Fiftieth Anniversary of the founding of the College will be held at the Medinah Athletic Club, June 8, at 6 p.m. There are indications that this will be one of the most memorable gatherings of the Alumni in the history of the institution.

RELATION OF PHYSICAL CHARACTERISTICS TO SUSCEPTIBILITY TO ANTERIOR POLIOMYELITIS

Milton I. Levine, Josephine B. Neal and William H. Park, New York (*Journal A. M. A.*, Jan. 21, 1933), studied from an anthroposcopic point of view a series of fifty-two children paralyzed by anterior poliomyelitis in the epidemic of 1931 and fifty-two controls living in New York at the same time. All poliomyelitis patients were matched by controls of similar age and race. No outstanding differences between the groups were noted in a study of the following factors; separation of teeth, overbite, alinement of teeth, lunulae, color, pigmented spots, mongoloid eyes, epicanthal folds, genitalia, and bodily type.

The Literary Digest's poll shows that physicians favor repeal of the Prohibition Law. Maybe the drys think we need more dry doc's.—*Greensboro Herald Journal.*

Correspondence

PEORIA CITY MEDICAL SOCIETY EXTENDS YOU A CORDIAL INVITATION

The Peoria City Medical Society extends to every member of the Illinois State Medical Society, a most cordial invitation to be our guest during the meeting of the State Society in Peoria, May 16th, 17th and 18th.

The Peoria City Medical Society was organized in 1848, and Dr. Rudolphus Rouse, who was one of the organizers, was also one of the small group who organized the Illinois State Medical Society and served as its third President. In the past eighty years the Peoria Society has been a very important part of the Illinois State Medical Society and has been host to its annual meetings many times. Our unselfishness in acting as host is proven by the fact that Peoria, the second city in the State, has not had a President of the Illinois State Medical Society in thirty-seven years.

We are well organized, with every member doing his part in planning to make the 1933 meeting the most outstanding annual meeting the Illinois State Medical Society has ever had.

Plan to come, hear the papers and partake of our hospitality.

HUGH COOPER, President,
Peoria City Medical Society.

INVITATION FROM THE PEORIA MEDICAL SOCIETY

The Eighty-Third Annual Meeting of the Illinois State Medical Society will be held in Peoria on May 16, 17, 18, 1933. It is now time for all members of the Society to make their plans to attend this Annual Meeting. Everything is being arranged to insure the comfort of all members and guests at the Meeting. The Sessions and General headquarters are all arranged to be held at the large, new Pere Marquette Hotel. Peoria has other modern hotels entirely adequate to take care of the attendance regardless of its size.

The Peoria Medical Society is anxious once more to demonstrate the advantages of Peoria as a Convention City, and to show the type of hospitality it is noted for. The Chamber of Commerce and all other Organizations are interested in your welfare, and are working as a

unit to insure the success of the Meeting.

Every member of the Peoria Medical Society, the second largest component Society of the Illinois State Medical Society, will be on hand to greet the many visitors in our City, and to aid them in getting located, and seeing that they are well entertained throughout the Meeting.

Peoria is centrally located and readily accessible from all parts of the State of Illinois by its system of hard roads, or by rail. Ample facilities are available to care for all cars driven to the Meeting, and you will receive a special privilege card which will be to your advantage while in Peoria. Even though the present year may go down in history as one causing unusual economic distress, we believe that the members of the Illinois State Medical Society are going to attend their Annual Meeting, enjoy the sessions, and forget the "depression." We hope that the membership will respond well to this invitation, and we expect to tell you more about our arrangements and facilities for entertaining you, in the May number of THE JOURNAL.

C. G. FARNUM, M.D., CHAIRMAN,
Committee on Arrangements.
HUGH E. COOPER, M.D.
President,
C. W. MAGARET, M.D.
Secretary,
Peoria Medical Society.

SPECIAL NUMBER OF THE RADIOLOGICAL REVIEW

Quincy, Illinois
March 17th, 1933

To the Editor: We want to especially call your attention to the March issue of THE RADIOLOGICAL REVIEW which is being mailed to you today. This is our sixth annual RADIUM NUMBER and contains ten original articles especially written for this issue by leading Radium Therapists. It virtually presents the present status of Radium Therapy in this country. With the present-day, wide interest in Radium because of its great usefulness in the treatment of many forms of cancer, every medical editor will be interested in this number of the REVIEW.

THE RADIOLOGICAL REVIEW
Editor, Harold Swanberg, M.D.

FUNCTIONS OF STATE DEPARTMENT OF PUBLIC HEALTH AND STATE DEPARTMENT OF PUBLIC WELFARE

To the Editor: Among physicians of the State as well as the public at large there prevails a very definite confusion of thought in respect to the functions and activities of the State Department of Public Health and the State Department of Public Welfare. The distinct difference in the work of these two departments is not clearly understood by many people. This fact has been emphasized lately by numerous physicians who have called upon me concerning medical appointments in State hospitals for the insane. The Health Department has nothing whatever to do with the administration of any State hospital or other institution for the care and treatment of charges of the State.

The Departments of Health and Welfare are two separate and distinct organizations. While the activities of both deal with many phases of human health, the work of each is in a very different field from that of the other and requires a distinctly different type of administration.

The Health Department deals primarily with the control and prevention of communicable diseases. For this purpose it maintains diagnostic laboratories at Springfield, Chicago and Carbondale. It maintains no other facilities that could be classed as an institution of any kind or in any sense of that word.

All of the State hospitals and institutions which involve the care, treatment, reclamation, discipline and education of orphans, aged soldiers and their widows, the insane and mentally deficient, delinquents and criminals, come under the jurisdiction of the Department of Public Welfare. The research hospitals, including the institute of juvenile research and the hospital for crippled children, also come under the Department of Welfare.

The work of the Department of Public Health, on the other hand, bears directly upon the suppression, control and prevention of communicable diseases. Among the principal activities of the Department of Health are the following:

1. Collection, classification, analysis and study of reports of communicable diseases. In-

formation thus obtained is made the basis for immediate efforts to suppress epidemics and control diseases on the one hand, and for measuring results and planning ahead on the other.

2. Maintenance of the vital records of the State. This work, which involves the receipt, classification, compilation, study and analysis of all death and birth certificates forms the very foundation upon which public health programs and plans for activity are based.

3. Distribution of biologics such as vaccines for smallpox and typhoid fever, antitoxin and toxoid for diphtheria, silver nitrate for prophylactic use in the eyes of the new born, anti-rabic vaccine and arsphenamine. The two last named products are supplied free only for indigent patients but the others are all free upon request.

4. Diagnostic and bacteriological laboratories for the examination of specimens of all kinds concerned with the control of communicable diseases and of samples of water supplies.

5. Promulgation and enforcement of quarantine and other rules for the control of communicable diseases.

6. Epidemiological investigations and consultation diagnostic service in respect to communicable diseases.

7. Educational activities that relate to the control of diseases through the use of vaccines and sera, sanitation, hygiene, proper nutrition, etc.

8. Sanitary supervision over public water supply and sewage disposal systems and the natural waters of the State.

9. Sanitary supervision over milk supplies sold as a *pasteurized* product.

Aside from the distribution of biologics and the diagnostic laboratory activities, the work of the Department of Health is largely educational in character. Even in matters of quarantine and law enforcement the object is chiefly educational and seeks to make easier the prevention of disease through a wider knowledge of preventive methods.

In many of its aspects the work of the Department of Health is closely associated with the practice of medicine. For this reason, harmony of purpose and cooperative effort between the Department and the medical profession is important. The Department solicits the support and cooperation of the physicians of the State and it extends to them an invitation to utilize the facilities of the Department.

I shall appreciate it if you will insert this communication in the JOURNAL at an early date.

Very cordially yours,

FRANK J. JIRKA, M.D.
Director of Public Health.

LIFE BEGINS

The most recent atrocity perpetrated by that form of art called the motion picture business is a picture called "Life Begins," now being displayed in various sections of the country according to the whims of the censorship boards. The action takes place for the most part in a maternity hospital, and particularly in a ward devoted wholly to difficult cases. The strange notion that it is the custom in maternity hospitals to put all the difficult cases in one large ward is of course without foundation in fact. The picture is full of action; in fact, there is so much action in the ward that it seems slightly busier than the corner of State and Madison streets, the busiest corner in the world. One of the patients drinks herself into a maudlin state with whisky kept in a hot water bottle and shortly thereafter gives birth to twins. Other patients are constantly hopping in and out of bed to attend to various affairs, most of which are not their business. In this eight bed ward they are attired in handsome kimonos, which they wear in bed. In the midst of the turmoil a psychopathic patient from somewhere upstairs wanders into the ward and helps out the excitement by asking for her imaginary baby. Then she walks into the nursery and removes a baby, which she brings back into the ward, causing the mother of this infant to stage something resembling a riot. The chief action centers about a decision of the physicians in the case of a woman, under a twenty-year sentence for shooting some ward heeler, to save the life of the baby rather than that of the mother, because the mother would have to spend the next twenty years in jail. This they do against the wish of the woman's husband. The performance was viewed largely by an audience of women and young girls, the young girls being most of the time in a state of hysterical laughter and the older women flooding the place with tears. It has been repeatedly urged in these columns that the movies have not yet grown up. Apparently now they have grown up but become insane.—*Jour. A.M.A.*, Nov. 19, 1932.

THE MORAL OF THE TALE

Teacher (warning her pupils against catching cold): "I had a little brother seven years old, and one day he took his new sled out in the snow. He caught pneumonia, and three days later he died."

Silence for ten seconds.

Voice from the rear: "Where's his sled?"

—*Annapolis Log.*

Original Articles

THE RELATIONSHIP OF THE PSYCHOLOGIST TO THE PSYCHIATRIST WITH PARTICULAR REFERENCE TO SPECIAL CLASS DIRECTION

FREDERICK L. PATRY, M.D.

Neuropsychiatrist State Education Department, University of the State of New York.

ALBANY, N. Y.

The common-sense approach to the question, Who shall organize and direct special-class education—psychologist or psychiatrist? would more or less lead us to the respective individual training and experience of the specific persons under consideration. Since it is not my intention to deal in personalities, but rather general inter-professional relationships, my thesis will lose more or less point. Such a reflection is understandable when we realize that psychology and psychiatry are both in somewhat chaotic states; consequently the training and experience of those who profess the right to the name, "psychologist" or "psychiatrist," lack respective common features. Nevertheless, there are essential general principles and practices which are recorded as fundamental to the equipment of both of these professions.

There is a tendency for new special fields of science to vaguely spread themselves out in their initial evolutionary phases of development until they find themselves and become more or less crystalized. Moreover, overlapping is to be expected, indeed is almost inevitable, when we arbitrarily set about to sharply circumscribe closely related and integrated subdepartments of science. For example, behavioristic psychology overlaps physiology, and the latter in turn invades the subject of biochemistry. Yet there is clearly discernible legitimate reasons for any of these special fields to delimit themselves notwithstanding the common ground or overlap. Besides, it is becoming increasingly common to find certain persons well qualified and capable of functioning in two or more major fields of special sciences which were formerly considered the sole province of one person who consecrated himself to that specialty as a life work. Thus we find physicians who are educators, school and university administrators, psychologists, sociologists, physiologists, chemists, and vice versa. Indeed the swing of the pendulum toward the development of specialists is returning to that of *generalists* who are also "specialists" in one or more particular field. Such a trend has been motivated by many factors, such as a too often missing well-rounded perspective and training, high cost of specialists particularly in times of economic retrenchment, and the tendency of oversupply of "half-baked" specialists who fail to give the service expected of them.

For the purpose of definition of the respective fields of psychology and psychiatry, in order that their services may be best utilized without or with a minimum amount of reduplication, let us attempt to give generally recognized definitions of these two sciences.

Psychology is a *pure* science which considers its province the study of behavior, both implicit (consciousness and mentation) and overt (behavior and concrete performance). Its task is to describe facts whether normal or abnormal (deviations from the normal in behavior or consciousness) in these fields and explain them by methods of introspection or objective observation.

Psychiatry is a medical specialty, analogous to other medical specialties such as ophthalmology, urology or pediatrics. It is an applied science and art which has for its objective the diagnosis, treatment and prevention of mental disorders, diseases, defects or malfunctioning. It includes their physical and mental symptomatology, etiology, pathology and any other scientific knowledge that can be applied to their diagnosis (through and through understanding) and therapy (symptomatic, specific or preventive), as well as the hospital and institutional care of such patients. Indeed, the growing emphasis in the physician's functioning is veering from the negative to the positive approach. Thus we find medical leaders such as Sir William Arbuthnot Lane stating that the doctor's first duty is to deal with health, rather than with disease. Again, the writer recently heard a nationally known pediatrist urge his students that their main duty is to keep people well, and I would add, reasonably happy.

From our point of view, as well as that of many mature psychologists, psychology is considered as a pre-clinical and basic medical science analogous to anatomy, physiology, pathology and biochemistry. Like the latter sciences it should be viewed as an essential help to the

physician in the understanding and treatment of patients whether they present predominantly physical or predominantly mental complaints. Invariably both types of factors are present and should be respected for what they are worth in giving lifts to the individuals who come to the physician for help. Medicine is more and more realizing the need of treating persons with diseases rather than disease entities, and in like manner education is realizing that its chief business is to understand and develop pupil personality in its social adaptation through the wise utilization of subject matter and extra-curricular activities.

Thus it will be seen that the psychiatrist's training is broader in scope and application than that of the psychologists. The psychologist, like the physiologist, may assist the medical student and medical clinician in the application of the general facts and principles of psychology to certain diagnostic and therapeutic problems encountered in patients, such as psychometric or "mental tests" of intelligence. But the psychologist is not qualified to practice in the medical sense. Such functioning requires a much broader training in many other basic pre-medical and medico-clinical sciences besides psychology. The psychiatrist's training also requires experience in the art of handling patients and those who assist in caring for them. The psychologist is merely a specialist in a particular field of science. Like the physiologist or anatomist he is not a substitute for nor has he any directive functioning in the consulting room of the well qualified psychiatrist. Let the psychologist confine himself to the laboratory, classroom and research problems, pursuing the task of observation, description and explanation of the facts of behavior and mentation processes.

With this preamble, let us consider the best utilization of the psychologist and psychiatrist relative to special class problems.

We are in this instance dealing with problems in children suffering from varying degrees, and from different causes, of mental defect, inherited or acquired. From our definition of the province of the psychiatrist's functions, individuals handicapped by mental defect fall within his specialty. Thus we find in certain states, Massachusetts and New York, where leadership has been shown in the understanding and treatment of mentally deficient persons, that their state schools and institutions are directed by well-trained psychiatrists.

But the question has arisen, when is the care and training of the mentally deficient child an educational problem, and when is it a medical problem? It is also a question in the minds of many thinking persons, should the organization and handling of these children, intra- or extra-murally, in special (ungraded or opportunity) classes be under the direction of a psychologist or psychiatrist?

The answer to these questions to some extent hinges on the particular philosophy of education prevalent or uppermost in the persons who have the say in special class creation and organization. It is common knowledge that in most state schools for the mentally deficient, the director is a psychiatrist who is assisted by teachers who have had special class training in certain academic and non-academic subject content and methods. However, in most public school systems an educational psychologist is still in charge. This state of affairs is not only due to the tremendous role tradition plays in educational practice, but also, as has been above stated, the current educational philosophy.

Owing to a number of factors which point to the failure of traditional educational methods of arriving at their objectives, our philosophy and practice are happily changing—and for the betterment of the pupil and all concerned with his welfare.

It is now recognized that the real purpose of education is not to teach subject matter per se but to teach pupils. Although all recognize an educational problem in mentally deficient children, yet it is becoming the increasingly general viewpoint that our main problem with the mentally retarded and deficient child is not merely educational but his social and economic adaptation to life. This demands a director not in the main trained in technical aspects of the *materia educata,* but a person who is critically and thoroughly trained and experienced in dealing with personality and emotional problems, variations in human constitutional and temperamental material and the promotion of the individual and group health, happiness, efficiency and social adaptation.

In a current number of *Mental Hygiene,*

Dr. V. V. Anderson,[1] who has won world-wide recognition in developing psychiatric examinations and practice in the personnel programs of industry and education, and is at present director of a private school which is a pioneer in translating psychiatric facts and principles into educational practice, states:

".....the primary purpose of the college should not be the stimulation of scholarship, but the training and well-rounded development of the individual student; second, that the general development of the individual is not necessarily an accompaniment of scholarship (too often, scholarship is related to the highly ineffective, neurotic, and maladjusted personality); third, that the main question is whether the coördinator and director of such activities should be a man trained in subject matter, curriculum organization, and educational principles or a man trained in the study and evaluation of the human personality; a man trained in technical matters about school courses and subjects or a man trained in technical matters about individuals—an educator or a psychiatrist."

Again, in the same periodical, Dr. C. O. Cheney,[2] Director of the New York State Psychiatric Institute and Hospital, and Professor of Psychiatry, Columbia University, gives timely advice:

"The problems of the interrelationships between psychiatry, social work, psychology, and sociology cannot be solved in a final way at the present time. Psychiatry is interested in the problems in which these other disciplines are concerned in so far as they involve human relationships and maladjustments. It is not, however, prepared, nor does it wish, to take over the activities of these branches of social science. Each can contribute its part to human betterment, but exactly what the respective contributions and fields of activity should be can be determined only after continued study and the coöperation of the persons concerned, with their respective interests and training. We submit the thought that a more or less fluid relationship between these various branches is not necessarily a detriment, but rather may be conducive to more progress than if exact definitions were set up, since definitions often mean a limiting and constriction of activities. A static condition may result and stimulus and curiosity for the extension of knowledge may be inhibited.

"We have the conviction, however, that the treatment of mental deviations, with their intimate mental and physical interrelationships and symptoms, remains within the province of the science and art of medicine and that psychologists or other lay workers with an academic education and perhaps a short course of lectures on psychiatry and mental hygiene, or even with certian clinical contacts with psychiatric problems, cannot thereby arrive at an adequate understanding of the causes and symptoms of mental deviations or be prepared to treat them properly.

"It is hoped that, as time passes, more thorough understandings may be reached. Meanwhile it seems important to avoid as far as possible, in our contacts with others interested in social problems, those emotional reactions which are apt to arise when we seem to be deprived of something that we think belongs to us, or when we are told that we cannot have something that another person has and that we think should be given to us. Educators rightfully believe that from their long experience they have a certain knowledge and understanding of pedagogical principles, and a criticism of their practices as ill advised and non-constructive naturally arouses a feeling in them that persons without adequate experience are trying to preëmpt a field that cannot adequately be occupied by them. Such criticisms, of course, bring about in us as well as in others resistance and defense reactions, and we as psychiatrists should know that a destination can be more quickly and happily reached by accompanying a person on the way than by driving him."

Even a cursory glance at the foregoing opinions and facts indicate that the psychiatrist's role in sharing and directing what was formerly thought to be the sole *sanctum sanctorum* of the educator has taken on a new complexion. Perhaps in another generation the educator of today would fail to recognize his colleague functioning in grossly different atmospheric perspective and practice.

It sometimes happens that educational administrators fail to see in proper proportion the functional relationships of psychologist and psychiatrist in special-class responsibilities as well as in child guidance work. Accordingly such demands and puzzling states and decisions as the following have arisen in the minds of some school administrators:

1. It would be to the advantage of the psychiatrist himself to do Binet-Simon Tests on pupils who are considered by the teacher as special class material. This would present an opportunity to the psychiatrist to win rapport with the school personnel and "sell himself" by rendering needed service.

2. In many instances of children suffering from mental retardation, there are also problems of maladjustment involving personality, conduct and emotional mal-functioning. Should the psychiatrist do his own psychometric tests he would be on the alert to discover and nip in the bud such disorders.

3. In some instances, it is pathetic to see exhibited the feeling-attitude that the psychologist and teacher personnel can render equal service to that of the psychiatrist in the

1. Anderson, V. V. and Kennedy, W. M. Psychiatry in College. A discussion of a model personnel program. (Mental Hygiene, 16:353-83, July, 1932.)

2. Cheney, C. O. Psychiatry in the Community. (Mental Hygiene, 16,384-91, July 1932).

understanding and reconstruction of personality and behavior disorders encountered in school work. It has also been said that although the psychiatrist is an excellent diagnostician, he fails to reconstruct the problem in a more effective manner than is already being done by the non-psychiatric personnel. Consequently some educational systems have dismissed their psychiatric "help" and replaced him by a "clinical psychologist." Because of such incidents, other administrators have been loath to employ psychiatrists. Such an attitude is only understandable when either the psychiatrist lacks essential training for his specific task or when he misconstrues a non-psychiatric problem, as solely his own. Perhaps gratuitous bias rather than a sympathetic inquiring, cooperative attitude is the leading factor.

4. Another interesting comment relative to the psychiatrist's attempt to re-educate the educator or amplify his present fund of knowledge and practice is that he utilizes too many technical terms and phrases which he fails to elucidate to his lay audience. On the other hand should he make himself understandable, he is often said to be merely uttering the common-garden variety of common sense.

By way of briefly commenting on and boring through such statements just enumerated, I should like to bring into focus the following facts and opinions:

1. Since the best and most economical utilization of available personnel should be our aim, it would seem to be folly to take the time of the psychiatrist for psychometric testing when such can be done by a less experienced, less highly trained, and less expensive personnel. The well trained psychiatrist will have no difficulty selling himself to school teachers and administrators on the basis of the therapeutic results in handling various behavior aspects of child conduct. Psychiatrists should in the main refuse referral requests which have as their reason or complaint "mental age or I. Q. desired." As a psychiatrist in one of the foremost departments of pediatrics in this country once told me, "I see red when I get such a request. No time is lost in returning the referral request to the sender." Such a reaction has an educational value since it forces the physician or other referring person to state the *complaint* in terms of what the child or others referring him would like help for. The mental age or I. Q. may or may not be a telling factor in the case. In any event it is only one of a large number of elements to be evaluated, and oftentimes the least significant. As far as special class formation is concerned, the request for the individual testing of mental age or I. Q. of pupils thought to be suitable material for such classes should be directed to the psychologist. Such request involves primarily an educational problem, not a psychiatric one. On the other hand, requests for help on the basis of a complaint which designates the pupil as "poor progress in school," "unable to learn in school," "uncooperative and takes no interest in school work," "has repeated every grade," etc. may be considered cases for psychiatric examination. Such *individual* complaint problems are matters of psychiatric concern; the mere psychometric examination of children for special class placement is primarily a matter for psychological examination.

2. Common sense should dictate that it is poor utilization of the psychiatrist's valuable and costly time to do psychometric examinations of children en masse for possibility of special class placement with the concomitant hope of ferreting out personality and emotional problems. Since the services of psychologists and psychometric examiners may be obtained for one-half to one-third of the cost of psychiatric service, it is obviously indicative of lack of relational perspective, if not an imposition, to request or expect a psychiatrist to do this work. Granted that the psychiatrist is trained in the pre-medical science of psychology (and the day is coming in medical schools when this science will be given as much deserving attention as anatomy or physiology), it is comparable to asking the physician or medical specialist to do routine urinalysis in the hope of discovering cases of nephritis, or comparable to asking him to do routine blood-counts in the hope of discovering a case of anemia. Such work can be done sufficiently efficiently by technicians. Of course the physician is always glad to hear and personally examine extraordinary specimens or findings and the technician should be instructed to notify the doctor should such be discovered. Similarly psychologists and psychometric examiners should call to the psychiatrist's attention more or less out-

of-the-ordinary behavior and personality problems encountered in their mental testing work. Frequently the psychiatrist wishes to do his own psychometric tests as well as his own physical examination, when time permits and when he is anxious to gain indirectly the patient's emotional reactions, attitudes and behavior. Thus when the patient is more or less off his guard in a non-formal psychiatric examination valuable supplementary information of telling importance to the psychiatrist is often obtained by such a practice.

3. More discriminatory efforts should be made in the selection of psychiatric personnel in relation to the specific position they hope to fill. This will lead to a more favorable reaction from educators since they are somewhat overfed or "fed up" on the "hip-hip-hurrah" phase of mental hygiene or preventive psychiatry. Concrete performance with favorable results which the school is unable to obtain without psychiatric help is the request now made of the psychiatrist. The latter must be on his guard not to promise more than his critical experience would indicate, and also caution those who seek his service that the millennium has not yet arrived—that many psychiatric cases are relatively unmodifiable.

4. Psychiatrists should school themselves to present their material to lay audiences in language that is clear, shorn of technicalities, and as simple as possible. It should be directly related and woven into the school's actual problems, experience and needs. Directions must be explicit and commensurate with the local opportunities and willingness of the school personnel to carry them out. Common-sense language and method is not to be decried; it is our greatest need. But it should be of the critical and trained variety. The psychiatrist's medical training should unobtrusively bring home the fact that although common sense and experience are good, they are not sufficient in themselves. As in the instance of intelligence, there is also an obvious "G" factor in common-sense psychiatry and common-sense psychology. We would therefore expect at times that lay persons would give some of the counsel which a highly trained psychiatrist might impart. But even though it be identical in kind, though different in quality, school administrators have told me that to have a psychiatrist say more or less the same thing gives a sense of authoritativeness with consequent favorable reaction on the part of the person seeking or needing help.

I have attempted to clarify some of the current problems of certain working and professional relationships of the psychologist and psychiatrist, particularly as their functioning relates to special-class problems and cognate interests. We have seen that the psychiatrist is first and foremost a physician who is engaged in the practice of an applied science and art; the psychologist, on the other hand, is a specialist in a pure science who sets for himself the task of observation, description and explanation of the facts of behavior and consciousness. His work is largely confined to the laboratory, classroom and research fields; the psychiatrist concerns himself with individual problems concerned with mental defect, disease and malfunctioning, their treatment and prevention. It is felt that the direction of reconstruction of these problems, which include mentally deficient and retarded children, and therefore special class organization, should be in the guiding hands of the psychiatrist rather than the psychologist. The latter may well assist the former in such work for example, as concerns "methods," especially when the psychiatrist lacks a basic training in psychology and pedagogy. Attention is given to some common misunderstandings and opinions of psychiatric functioning as it has shown itself in certain educational fields. It is the author's hope that his attempt at interpreting the conceptions and working relationships of these two professions will result in a more balanced perspective and a smoother working integration of their respective services.

State Education Department.

PRIMARY ACTINOMYCOSIS OF STOMACH

A proved case of primary actinomycosis of the stomach with metastasis to the liver, reported by Alexander W. Blain, Detroit (*Journal A. M. A.*, Jan. 21, 1933), is apparently the second authentic case in the medical literature. A review of both the American and the European literature reveals no cases of primary gastric actinomycosis to have been reported in the United States and that in the six cases reported in the European literature only one survives strict diagnostic scrutiny.

Second-hand American tires are being exported to Serbia and Latvia to be made into footwear. Chiropodists over there ought to be kept pretty busy treating tired feet.

—*Philadelphia Daily News.*

NECROSIS OF THE PANCREAS WITH CONGENITAL ABSENCE OF THE GALL BLADDER

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Congenital absence of the gall bladder is a rather rare anomaly. Mentzer of San Francisco, in the issue of the Journal A.M.A. for October 26, 1926, reported fifty cases in his review, and he found one case in sixteen hundred necropsies. Bower, of Philadelphia, collected sixty cases from the literature, one case with a double liver, which is the rarest anomaly. He also states that in forty cases in which the gross appearance of the liver was noted, cirrhosis was diagnosed twenty-nine times, thirteen of the hypertrophic type, and sixteen of the atrophic type. Bower is the only writer in my review of this subject who referred to the pancreas in these cases. He stated that the gross appearance of the pancreas was mentioned in but twenty per cent. of the cases collected. In one instance the head of the pancreas was missing, in three others the gland was atrophic, in adults the pancreas in all instances was thickened or injurated.

Clinically, absence of the gall bladder is not of much importance except as it plays a part in the etiology of pancreatic disease. There have been many unsatisfactory explanations of the absence of gall bladder; among them, that it is due to fetal peritonitis, or luetic peritonitis in early life, or that it is associated with hare lip, cleft palate, anomalies of the ears and hands, but no scientific proof of any of these theories have been forthcoming, and in this case no evidence of the above conditions was present.

Case report. Mrs. E. T., female, aged 49 years, first seen September 16, 1932, at her home, complaining of pain and tenderness in the upper abdomen, with marked distress and eructation of gas. She stated that twelve days ago while in Canada, she had a severe attack of abdominal pain with vomiting, for which hypodermics of morphine were necessary. This did not make her comfortable but it was not considered an emergency surgical case at this time. She returned to her home in Chicago.

Past history. Frequent attacks of nausea and vomiting all her life. Difficulty in feeding as a child. Nausea and vomiting every week for past four years. X-ray of gall bladder four years ago after the ingestion of dye showed no dye entering the gall bladder, so at that time a diagnosis of pathological gall bladder was made. No operation at that time or at any time since.

Marital history. Married, no children, no miscarriages. Menstruations normal. In menopause at this time.

Family history. Mother died of carcinoma of the pancreas, aged 82. Brother died of heart trouble, aged 59. Father died of apoplexy, aged 75. Three sisters living and well.

Habits. Regular. No alcohol. Could not eat rich foods. Bowels regular. Housewife. Had been a nurse.

Physical examination, September 16, 1932. A well nourished woman aged 49; 5 feet, 5 inches tall, weighing about 175 pounds, who is quite ill with pain and tenderness of the upper abdomen. Temperature 98; pulse 94; respiration 26.

Head: Scalp negative.

Nose negative.

Eyes: Cornea very slightly icteric. Pupils equal and react to light and accommodation. No paralysis. No ptosis. No squint.

Ears negative.

Mouth: Teeth good. Tonsils normal. No sepsis. Pharynx normal.

Neck: Movements normal. No glands, no goiter.

Chest: Large feminine chest; no scars; breasts normal, no masses.

Lungs: Apices and bases movable, expansion normal, tactile and vocal fremitus normal. No rales, no consolidation, no flatness nor any evidence of pulmonary pathology.

Heart: Right border out a little; slight enlargement of heart; systolic murmur over mitral area, constant in character and also heard in the left axilla; no arrhythmia and rate normal. Pulse regular, 86 beats per minute. Blood pressure: systolic 140, diastolic 80.

Abdomen: Marked tenderness over entire abdomen with distention and tympanites. Tenderness more marked over upper right abdomen but no rigidity. Mass was outlined on the right side corresponding with the liver and this dullness extended almost to the umbilicus and over to the left of the mid-line about 3 fingers breadth below the margin of the lower ribs. Spleen was not palpable. Complained of severe pain in the back of the abdomen as if from pressure.

Inguinal region: No glands, no hernia, no masses.

Extremities: Both upper and lower extremities did not show any abnormalities nor any glands.

Back: Nothing could be seen on the back; no redness or evidence of bone pathology.

Vagina: Normal, uterus of normal size; no tumors; no tenderness; no bleeding; cervix normal, position good.

Rectum: No ulcers, no hemorrhoids, no fissures, no tumors, no structures, no prolapse.

Reflexes: All reflexes were normal; no rhomberg; no ataxia.

Diagnosis at this time:

1. Low grade suppurative cholecystitis with
2. Hepatic phlebitis with probable abscess of the gall bladder and liver.

Differential diagnosis: We considered

1. Malignancy about the biliary ducts or the pancreas;

2. Chronic cholecystitis with hypertrophic cirrhosis of the liver;

3. Cyst of the pancreas;

4. Acute pancreatitis was not strongly thought of because of the length of time of the illness and the very slight temperature, slow pulse, and in general did not present the picture of an acute surgical abdomen at this time.

Consultation with other staff members was held and the conclusion was: Cholecystitis with enlarged liver; but advised waiting and observing the case until such a time as more definite findings would present themselves to warrant surgical intervention.

Course:

September 16, 1932. Flat x-ray was made of the abdomen because patient could not retain the dye and was too sick for the intravenous administration of the dye. Report of the roentgenologist's x-ray examination of the region reveals no evidence of abscess formation nor of a gall bladder shadow. Liver shadow is enlarged in all directions. No evidence of stones in region of the gall bladder. Both diaphragms are obliterated and both costo-phrenic angles are obliterated. Lung fields are normal in appearance.

Laboratory Findings:

W.B.C. 12,900; 84% neucrophils, 11% S. lymphocytes, 2% eosin. R.B.C. 2,990,000. Hemoglobin 60%.

Wassermann negative; Kahn test negative.

Urine: 1030, acid, clear, albumin positive, no sugar, few coarse granular casts.

September 17, 1932. No sedatives of any kind were given for the next three days. Patient felt better after several high enemas and was kept under observation until the night of September 19, 1932, which was a period of three days running a temperature from 98 to 100, pulse 100 to 90, respiration 26 to 28, until the night of

September 19, 1932, 9 P. M.:

Temperature 101.4, pulse 110, respiration 24. Pain more severe; tenderness more marked. Abdomen again showed distention. Nausea and vomiting after three days of retaining food. Case was now considered one for immediate surgical intervention, still under the impression that it was a gall bladder case.

Operation: Exploratory laparotomy September 19, 1932, 10:50 P. M. to 11:35 P. M. Gas-ethelene-ether anesthesia.

Surgical procedure: Right rectus incision to the peritoneum. Peritoneum studded with yellowish white areas the size of a match head and of the appearance of pancreatic digestion. Inside the peritoneal cavity, there was fat necrosis all over the peritoneum and omentum. Liver not enlarged, but bowel and omentum all adhered together, giving the impression of an enlarged liver on external examination. Gall bladder region explored and the gall bladder felt normal. No stones felt. Gall bladder was not seen because of adhesions. (This undoubtedly was the soft Spigelian lobe of the liver which was felt; it being the exact size of a normal gall bladder on postmortem examination.) Pancreas was very much enlarged, at least six to seven times its normal size, and very hard throughout the entire organ. In exploring over the mesocolon a soft area was encountered which broke and four cupfuls of dirty grey necrotic material was scooped out of the abdomen. Abdomen sponged out and three guttapercha cigarette drains inserted into the abscess cavity. The incision closed in the usual manner with three silk worm gut rentention sutures in the skin and fascia in addition to other sutures.

Condition of patient. Immediate condition good. Patient put to bed in the semi-Fowler position with the usual post-operative orders—rectal fluids, etc.

Pathologist's report: September 19, 1932: Necrotic homogeneous pink staining material in which no definite structure can be identified.

October 10, 1932: Piece of tissue picked out of the wound during a dressing and sent to the laboratory for examination. Report: "Necrosis of tissue is so advanced no cellular structure can be identified."

Course and progress of the patient. Patient ran a stormy course with wound draining well. Temperature ranging from 99 to 100—102 occasionally—until the day of expiration when the temperature rose to 106. Respirations 20 to 24 per minute. Drainage profuse throughout.

Urine: Frequent urinalyses showing trace of albumin and at times a trace of sugar. From October 18 to November 2, 1932, acetone was present in the urine.

Blood-sugar, October 19, 1932: 149 mgs. per 100 cc. blood.

Gastric Contents, October 20, 1932: Bile positive; blood positive; mucus positive; no fat.

Appetite poor. Never wanted food.

Vomiting: Would vomit almost continually the last ten days, even after stomach lavage. Duodenal tube was put into stomach but failed to get out of the stomach as shown by the back flow and also by the return of the methylene-blue dye which was used.

Patient expired November 2, 1932, six weeks after operation.

Postmortem findings: External examination reveals a white woman about fifty years of age who appears pale and thinner than normal and who is slightly jaundiced. The breasts show old hyperdermoclysis scars; the abdomen shows a right rectus scar in the upper right quadrant about eight inches long with a draining sinus at the upper end. Postmortem incision was made and the abdomen opened. There was one inch of fat in the abdominal wall, the recent operative incision had closed at the skin, but was unhealed underneath; the muscles were necrotic and separated. Abdomen was opened and revealed the omentum up around the liver and stomach and was fatty and studded with white necrotic pea sized masses; the peritoneum was bluish grey and studded with white soft necrotic masses.

Stomach, duodenum, jejunum, ileum, colon, all appeared normal except for congestion, distention and adhesions.

Uterus, tubes, ovaries, broad ligaments and pelvis were negative.

Liver was pale, soft and granular and slightly en-

larged. The Spigelian lobe was soft and about the size of the gall bladder. The hepatic, cystic and common ducts were traced and no gall bladder could be found, nor any scar tissue which might previously have been a gall bladder. There were two hepatic ducts, both entering the liver, neither one larger than the other and both fusing to form the common duct.

Lesser peritoneal cavity was massed together by adhesions and was filled with greyish necrotic pungent material in which a hemorrhagic, necrotic pancreas was apparently floating without any visible attachments, and was easily picked out, and on cut section was entirely necrotic throughout, no normal tissue could be found anywhere in the entire organ. The posterior portion of the greater peritoneal cavity was filled with the same necrotic material.

Intestines: The small bowel was adherent and the mesenteric glands were soft and necrotic.

Pylorus: No organic structure or pressure obstruction was present. Spleen and kidneys were not examined, and the chest was not opened.

Anatomical diagnosis:

1. Necrotic abscess of the pancreas with hemorrhagic pancreatitis.
2. Congenital abscence of the gall bladder.
3. Chronic hepatitis.

COMMENTS

1. The case had many clinical findings of a gall bladder case.
2. Normal blood sugar and no urinary sugar for five weeks.
3. Undoubtedly this case started as acute pancreatitis, then an abscess of the pancreas, and finally, acute necrosis of the pancreas.
4. We must have felt the Spigelian lobe of the liver at the time of operation, it being about the size and shape and consistency of the gall bladder.
5. Did the absence of the gall bladder play any part in the causation of the pancreatic disease in this case?

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TRANSPLANTATION OF EXTERNAL BILIARY FISTULA INTO THE DUODENUM

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Taking into consideration that medical literature reports only a limited number of cases of successful transplantation of postoperative biliary fistula, I thought it worth while to describe one operation which proved satisfactory.

The patient, W. P., 60 years of age, entered the Evangelical Deaconess Hospital December 27, 1928, with a history of slowly developing painless jaundice, for the past four months. General examination revealed marked emaciation and general jaundice, with old and recent scars on the skin due to scratching. Eyes normal to L and A. Somewhat injected throat; teeth in poor condition. Marked bradycardia. Liver three fingers below costal margin. A large mass was palpable and extended to the middle distance between the umbilicus and symphysis. This mass followed the respiratory movements, was circumscribed, fluctuating and painful. Defecations were completely acholic. Urine; plus-albumin, no sugar, full of bile pigment and dark colored. Blood: erythrocytes, 3,000,000; leukocytes 8,100; no eosinophils. Wasserman and Kahn, negative. Coagulation: 8½ minutes.

Diagnosis: Chronic obstruction of the common duct caused by chronic pancreatitis or carcinoma of the head of the pancreas.

The patient received, with the routine pre-operative preparation, three intravenous injections of 10% calcium chloride in 10 cc doses. Operated on December 31, 1928.

The abdomen was opened with a right upper rectus incision, under novocain and ether anesthesia. (Spinal anesthesia was not considered safe because of possible bleeding into the spinal canal). The stomach and duodenum were found normal. Liver enlarged and the pancreas head presented a nodular mass. The gall-bladder was immensely distended, reaching two inches below the umbilicus and covered with adherent omentum. During the delivery of this pint-bottle sized gall-bladder, it ruptured at the neck involving probably the dilated cystic duct itself. After this accident, the gall-bladder was removed. The stump of the cystic duct was ligated. The choledochus was explored and found greatly dilated. No stones were palpable, but several hard glands were present. Choledochotomy was done and probing of the duct toward the duodenum revealed an impenetrable resistance. A T-tube was inserted into the duct and the abdomen was closed with

three cigarette drains. A diagnosis of carcinoma of the head of the pancreas was made.

The patient made a stormy recovery because of a deep trychophytosis (Kerion Celsi) which developed on the occiput. This was opened, curetted and cauterized; and, parallel with the clearing up of the jaundice, it healed. The T-tube was removed four weeks after the operation. The patient left the hospital March 5, 1929, draining large quantities of bile through the established fistula. From the time of his operation he had gained 19 pounds.

He was expected to live from six to eight months longer and during this period be relieved of itching and be comparatively free from pain. However, he improved very steadily, gained weight and worked during most of this time in a Wisconsin Lumber Camp. His only worry was what to do during the winter, when inclement weather and hard work would make it awkward for him to change his bile-soaked dressings. In view of his clinical improvement and the necessity of his working for a living, it was decided to abolish the biliary fistula by transplantation into the stomach or duodenum.

He reentered the hospital June 26, 1929, in good general condition, except for a trace of sugar in the urine. His blood sugar was 135 mg. per 100 cc., erthrocytes 4,200,000 and leucocytes 9,000. A second operation, under spinal anesthesia, was undertaken June 28, 1929. A catheter was inserted into the fistula and fastened to the skin with silk. The abdomen was opened medially from the old scar. Diffuse membranous adhesions plastered part of the stomach, duodenum and omentum in one mass to the inferior surface of the liver. After freeing the duodenum one could trans-palpate the head of the pancreas which presented a markedly enlarged, irregular, nodular mass. Feeling the density of the scar tissue along the hepato-duodenal ligament, we did not attempt a dissection of the lower part of the common duct. The fistulous tract which was easily palpable with the catheter inside was coned out. An oblong block of scar tissue was left around the external opening. Farther down we employed circular dissection, going 1 cm. beyond the edge of the liver.

Then we amputated the skin from the oblong block of scar tissue left at the external end of the fistula's tract. By trimming the remaining part of this scar tissue, we prepared two opposite flaps with double armored sutures with which we slipped the fistula into a 1½ cm. opening of the nearest situated part of the descending duodenum. The sutures were brought from inside to outside, through the edge of the duodenal incision and were tied as mattress-sutures.

With a few double-O catgut sutures, the edge of the duodenal opening was fastened to the fistula's tract circularly. A small tag of omentum was used as reinforcement against possible leakage. The abdomen was closed with two cigarette drains. The patient who had been ordered to discontinue bile tablets one week prior to the operation, and had acholic stools, on re-entering the hospital, now had well-colored defecation following an enema on the second post-operative day. His recovery was uneventful and he left the hospital July 17, 1929.

He reported to my office once every month that he had normal colored stools. His only complaint was an occasional dull pain in his back. In March, 1930, he came complaining of weakness, drowsiness and thirst. There was no icterus present. He had lost five pounds in weight and his urine showed 2.4% sugar and 3 plus acetone. The stools were brown. He was not able to stay in the city for sugar tolerance determination, so on May 26 he returned to the hospital for this purpose. At this time he also complained of pain in the epigastrium and over the right lumbar region. He was frequently nauseated, had vomited twice during the past week and had lost 25 lbs. in weight.

On June 10, 1930, he left the hospital with a sugar tolerance of 230 gm. of carbohydrates. He returned to work, but in his letters to me he said that it was getting increasingly difficult for him to perform his duties as watchman and finally he re-appeared in my office. On this visit he complained of boring pains in the epigastrium and in the back. I found his urine loaded with sugar.

Subsequently, he went to Minneapolis and later I received a letter from Dr. Dixon of the Mayo Clinic, in which he stated that the patient had 1.7 mg. bilirubin in 100 cc. of blood and his blood sugar was 140 mg. per 100 cc. The last letter I received from this patient was three months later. He wrote that he had developed a "sore toe" and asked for advice. I urged him to see a doctor. After repeated inquiries I failed to get an answer. Later a friend of his communicated with me and said that the patient had undergone an operation on his foot and died.

This patient had a carcinoma of the head of the pancreas with total obstruction of the lower common duct. At the time of his first operation, a cholecysto-gastrostomy should have been done, but following the above described cause it was not deemed feasible and external drainage was used to relieve the jaundice. The choledochoduodenostomy was not done, because the patient's condition required the shortest and least severe operation.

A second operation very successfully abolished the external biliary fistula and the patient lived 18 months without having been troubled with jaundice. Finally the cancer of the head of the pancreas invaded the caudal part of the gland and probable destruction of the islands of Langerhans caused the diabetes with its consequences.

In the literature, I have found reported, up to date, 25 cases of transplantation of external biliary fistulae. Dr. H. Williams[13] was the first to perform this operation successfully. Lahey[3, 4, 5] reported 8 cases with 2 deaths. Lilienthal,[6] Barber,[2] St. John,[9] Roeder,[7] Waugh[12] and Bani[1] each reported one case;

Walters[10, 11] reported 8 cases and N. Soroko[8] reports 2 cases from the Feodorov Clinic. All the authors have the impression that this operation is technically easy to perform and the dangers connected with it are no greater than by other operations for reconstruction of the extrahepatic bile ducts.

Relative to technic, Lahey[4, 5] pointed out that apparently the only important fact was to leave sufficient tissue around the fistulous tract and that dissection should not go farther than the edge of the liver. Keeping in mind these two factors, the blood supply of the transplanted tract will not be impaired. Sloughing and the collapse of the implanted tract will be prevented.

After cholecystectomies, where for some reason a permanent external biliary fistula remains and where a secondary operation (the choledocho-gastrostomy or duodenostomy,—or hepatico gastrostomy or duodenostomy) could be accomonly by facing extreme technical difficulties, it seems to me that the transplantation of the fistulous tract into the gastrointestinal canal should be considered more often than it is.

This operation is technically much easier to perform than it is to handle the extra-hepatic ducts for this purpose and the dangers or postoperative complications are apparently no greater. The transplantation of an external biliary fistula is advisable only in such cases where it is evident that the fistula effectively drains the common or hepatic ducts.

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HEALTH EXAMINATIONS OF COLLEGE STUDENTS*

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The idea of health examinations for college students has been in force for many years particularly in some of the Eastern schools. It has increased in scope particularly in the larger universities where the health service undertakes to furnish if desired complete medical attention to the administrative, faculty, domestic and artisan groups as well as the students. At first in the larger men's schools health care was given especially for those favored representatives of the institution on the athletic fields, particularly the football and crew men. Where the student body lived mostly in dormitories or halls on the campus it was early found essential to provide some means of caring for the ill ones of the group particularly with reference to epidemics. An infirmary service soon became an integral part of the equipment. Those students who lived off the campus had to depend pretty much on the care of their landladies, go to a hospital, or go home. One of the functions of the dean of one school is recorded as being nurse for some sick students in rooming houses in a college town.

The general increase in the interest in the physical condition of the students is prompted not only by humanitarian reasons. The college accepts a certain responsibility from the parents for the care of the boy or girl for nine months of the year. This applies to all types of institutions but is particularly true where living is in the building, in halls and dormitories and practically all the student's time is spent on the campus.

Greater interest in physical education, increased facilities and equipment for exercise including swimming make it not only advisable but necessary that there be an adequate

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inventory of physical status before entering these activities. Furthermore intramural as well as intercollegiate competition now demand that representatives of hall, class or college be in shape to compete. The responsibility for this has now by rather common acceptance been delegated to the college.

This paper presents a report of health examinations of students at MacMurray College for the past ten years. Examinations were conducted during the two previous years but did not cover the majority of students and were not supported by records that could be adequately analyzed. All examinations were conducted by the writer except in 1930 when Dr. W. H. Weirich divided the work.

The inception of the work was in a conference eleven years ago with Miss Austin, the former dean, Miss Miner, the college nurse, and Miss Boyd, at that time head of the Department of Physical Education. The support of Presidents Harker and McClelland, Deans Austin and Hawkins, and Registrar Metcalf over this period has been much appreciated. Miss Miner has helped with the examinations and the conclusions have been cleared through her office. There have been four heads of the Department of Physical Education in this time, Miss Boyd, Miss Thurston, Miss Rearick and Miss Bass. The real work and responsibility has fallen on them and on their assistants and senior students as will be shown below. It would never have been possible to carry out the details of a plan which has apparently worked in a fairly satisfactory manner without the great help that these people have given so freely. The staff and senior students of this department give practically all their time during the first two or three weeks of school to scheduling, making and recording the results of various physical measurements as well as assisting in the medical examinations.

As soon as possible after college opens appointments are made for first, freshmen, then members of the other classes to have the first set of observations taken by the personnel mentioned above. The student entering college is given a blank set of cards. The previous years cards are given to the returning girls. The report of the home physician is attached to the card if any positive findings or recommendations are made thereon. Space for a simple medical history that will give pertinent facts is provided. This history is supplemented in the first interview with the physical education people as well as at the time of the medical examination.

Height, weight, comparison of this with the normal, lung capacity, chest expansion, general physical make-up with special reference to body mechanics and posture are noted. This gives really quite a comprehensive picture when these findings with the history are reviewed when the student appears before the physician. If variations from the normal are found here they give leads to what to look for. One can grasp in two minutes what has required the effort of several people for that time multiplied ten or twenty fold.

Appointments for the medical examiner are scheduled in the evenings as a matter of personal convenience to him. This means overtime work for everybody but appears the best way to expedite things and get classes organized. The team for general examinations in order of contact with the student consists of one or two physical education majors as clerks to arrange cards so they will be available, a member of the department staff who takes pulse readings, recording clerks, one or two nurses and the physician. Students come to the gymnasium, are given their cards, disrobe, have their pulse rates taken at rest, after exercise, then after two minutes rest, then come into an adjoining room for the general survey.

The history and physical measurements are scanned, additional facts or comments dictated. The blanks provide spaces for notes on throat, thyroid, heart, lungs, blood pressure and abdominal findings with additional spaces for any special feature. The procedure now in use is to make abdominal examinations on all freshmen and on all others on whom positive findings have been noted or who have had some change in their history since previous recording. It has served to speed things along by setting aside some evenings for nothing but abdominal examinations, using this opportunity for more special studies in the cases where these are indicated. Urinalyses are requested on all cases of organic

heart disease and hypertension or where something in the history or examination suggests the advisability of this.

It should be borne in mind that the primary function of these examinations is the gradation of girls *well enough to come to college* as to capacity to participate in the physical education work required and to enter the swimming pool. Students are classed as suitable for:

1. General participation and swimming.
2. Modified participation and/or swimming.
3. Corrective classes with recommendations for type of corrective work.
4. Individual corrective work as in three.
5. Walking.
6. Rest.

As a rule the recommendations are made at the time the examination is completed unless additional checking is necessary later. No treatment is prescribed. Those in need of medical attention are referred through Miss Miner to their physicians. The recommendations of the girl's own physician in regard to either restriction or increase of activities have been accepted as the primary basis and the examination results taken as secondary always. It is desired to stress this point as the names of many physicians from all parts of the country are found on the preliminary examination blanks as furnished by the girls.

The results over this ten year period cover 3120 examinations of 1752 girls. Girls now receive an examination each year in their college course. Curriculum changes now provide that students entering under the terms of the 1930 catalogue, unless excused by medical certificate, take four years physical education work and must be able to swim in order to graduate. This means a well rounded program of physical education for every student. Those students who by reason of physical defects are barred from general participation secure their credits in one of the remaining five categories listed above.

TABLE I

Year	Number examined	Class 1	Classes 2-6	%
1923	254	229	25	10
1924	261	225	36	14
1925	286	237	49	17
1926	290	225	65	22
1927	288	234	54	19
1928	314	261	53	17
1929	277	226	51	18
1930	425	371	54	12
1931	397	342	55	14
1932	338	295	43	13
Totals	3120	2635	485	15 Average %

The tabulation by years is shown in Table I.

This tabulation and material for the class group in Table 2 could not have been made without the helpful assistance of Mrs. Alice Agger of the Department of Physical Education.

It was at first somewhat difficult in the analyses of the figures of the various years to explain first the jump in percentage in 1926 and second the lowered figures for the last three years. Study of the charts revealed, however, that for the first group there was a definite increase in the restrictions for abdominal conditions as those examinations were instituted more generally then. The explanation for the lowered figures for the last three years lies perhaps in extension of types of courses offered and possibly in somewhat generally better physical condition of girls entering college. The preliminary medical examination by home physicians now being required for entrance may have also something to do with this.

Restrictions vary greatly, of course, in their clinical classification for groups two to six. The first three in order of frequency are chest conditions (diagnosed mainly as arrested, inactive or suspicious tuberculosis), organic heart disease and hyperthyroidism. Chronic appendicitis, post-operative abdominal conditions and pelvic disorders make up the next largest group. Diagnoses of various scattered conditions are responsible for a few limitations each year.

The classification for correctives by years is shown in Table 2.

Every year the diagnosis of arrested, inactive or suspicious tuberculosis runs almost

TABLE II. CLINICAL CLASSIFICATION FOR CLASSES 2-6 BY YEARS

CONDITIONS	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
Chest	8	8	13	17	14	11	9	13	11	16
Heart	9	8	17	18	15	18	17	12	14	9
Thyroid	5	5	4	7	6	12	14	18	13	8
Chronic appendix	0	3	2	8	8	5	4	1	1	1
Pelvic disorder	0	2	1	2	0	0	0	0	2	2
Post-operative	0	4	4	5	4	2	2	1	5	1
Post-infectious	1	1	1	0	0	0	0	0	0	0
Arthritis	1	1	0	0	0	0	0	0	0	0
Old poliomyelitis	1	1	0	0	1	1	1	2	1	0
Splenic anemia	0	1	0	0	0	0	0	0	0	0
Back disorder	0	0	0	0	0	0	1	4	2	2
Urticaria and angio-neurotic edema	0	2	2	2	2	0	0	0	0	0
Lymphadenitis	0	0	1	0	0	0	0	0	0	0
Hypertension	0	0	1	0	0	1	0	4	3	2
Otitis media	0	0	2	2	2	2	0	0	0	0
Gall bladder disease	0	0	0	1	0	0	0	0	0	0
Sinusitis	0	0	0	2	2	2	2	0	0	0
Post encephalitis	0	0	0	1	0	0	0	0	0	0
Purpura	0	0	0	0	0	0	0	0	0	1
Anemia	0	0	0	0	0	0	1	0	0	1
Nephritis	0	0	0	0	0	0	0	1	1	0
Overweight	0	0	0	0	0	0	0	0	2	0
Totals	25	36	49	65	54	54	51	54	55	43

equal to or ahead of the others. This is in keeping with the findings of Chadwick, Opie and others. Several times a positive open case has been found in the freshman class. Two of these instances were in daughters of physicians. Such findings are reported to the Dean's office and the recommendation made that these girls leave school at once. So far as records and memory indicate there has been during the ten year period one instance of active tuberculosis develop during the college year. That particular case was found at examination to have an old thickened pleura; later, after a bronchopneumonia, developed pleurisy with effusion due to tuberculosis. That there have been other cases develop after leaving school for one reason or another is readily recognized in view of the statistical frequency of tuberculosis but there is no way to check this up. Girls in whom there is definite evidence of former activity are placed in groups five or six.

The classification of restrictions depends obviously on the degree of disability as well as the diagnosis. This is well shown in the large and important group of organic cardiac disorders. There are and have been girls majoring in physical education who have a heart lesion. There are and have been others with the same diagnosis but who put in rest hours for their credit in this department. Some others are in the grades of greater activity. The functional capacity as shown by the vital capacity test, the response to exercise and the general estimation of the power of the myocardium and degree of compensation are the criteria for decision.

Some girls are restricted only from diving, some from diving and swimming because of a chronic otitis media or sinusitis. Such girls take part in all other activities. A few who have learned to swim before developing some type of pathology have the privilege of taking plunges but are restricted from any competitive work in the pool, on the field or in the gymnasium.

If one class is followed through there are some interesting findings with regard to those who stay in college and those who drop out. The freshman class entering in the fall of 1930 was a large one but as with many colleges in the last few years suffered a considerable drop. This was the first class to enter under the new catalogue ruling, hence it has some interest. There were 251 freshmen examined; 19 of these were graded for corrective. Ninety-six of the 251 returned for the sophomore year; 13 of these were in corrective both years, one was added to the corrective group following a pneumonia in the late spring. This year 58 returned as juniors. Two of these have been in corrective all three years in college, four have been in for two years and four were added to the

corrective group this year. All but two of the girls who have joined the corrective group since the first year have had either some severe acute infection or an operation. It would appear that two inferences may be drawn. One is that most of the girls who have some definite disability drop out by the end of the second year as only two of the original nineteen now remain; the other that acute infections, rather than overstrain, are more responsible for limitation of activity.

The objective of the College and of the department is to provide some type of physical exercise for every girl. While eighty-five per cent. of the girls are considered able to take part in all activities, the other fifteen per cent. are the ones to whom much special and individual attention is given.

Classification of minor defects, especially postural defects, which can mar a girl's whole appearance, is not attempted in this medical selection. Nevertheless grading of posture and body mechanics is carried out as shown on the blanks. The general classes as well as the corrective classes give work to improve posture and grace and to overcome the "debutante slump." It is of interest to note in the girls who remain on for more than one year the improvement when seen at the time of their later examinations. Such improvement is observed in the carriage and figure as well as noted on the records. This is corrective work that includes all students whether in the eighty-five or the fifteen per cent. groups. It is in the writer's opinion one of the definite advantages of a college education in an institution where attention is given to this important feature.

Individual and class work of corrective type is available for groups two to six and for some of group one who may need special attention. Recommendations for the various exercises, chest, abdominal, back, leg, arm, Schott for cardiacs, massage, corrective swimming are made as a result of either the first general or more detailed re-examination if necessary. Results of this sort of therapy combined with general hygiene of the regular life of school have been gratifying. It is understood of course that organic defects existing prior to entrance cannot be removed unless an operable condition exists. A girl entering under such classification and put in corrective work is apt to stay in that category throughout her college course. Nevertheless much can often be done in the way of physiotherapy to help that girl from the physical standpoint and what is more important to help her mental attitude, to keep her from that bane of all educational institutions the feeling of being "left out of things." Furthermore there is the important group of functional disabilities who may after a period of greater or less length of corrective training "graduate" into regular participation.

It may be well to consider the possibilities of a reversal of the picture. The question is often asked by parents, and a positive statement has sometimes been made by doctors of the dangers of general participation. The control over student health, the possibility of overstrain, the danger of some undiscovered condition developing after examination and classification, do not come strictly within the province of this paper. Yet they must be and are considered. Scarcely a week during the college year goes by without reference being made to the condition of some girl. Most of this is handled through the college nurse and the Infirmary. The examination records are available for comparison. The findings of any physician are taken into consideration without consulting this writer. The general plan of arranging the type of work suitable for the individual girl is followed as outlined above.

An acute infection may change the picture within a short time as shown in the tabulation. A case in point is that several years ago a major in the physical education department contracted typhoid fever in the summer vacation between her junior and senior year. When she returned to college a definitely overactive thyroid was found which necessitated her changing courses. Last year a freshman who was in excellent condition in the fall developed an organic heart lesion after an attack of pneumonia so that now she is on very limited activity.

The records do not show many changes in classification unless some intercurrent condition has set in. On the contrary tendency to improvement in physical condition is the rule. There are a few cards that show mis-

classification in the way of diagnosis of thyroid activity. A thyroid status apparently considered as normal later turned out to be overactive with resultant necessity for limitation of physical exercise.

An example of the value of the preliminary measurements is shown in a case under this heading. L. C. was examined in the fall of 1931, vital capacity was 174 cu. in., a full thyroid was noted on physical examination, all other findings normal. She was put in Class 1 and apparently carried on throughout the college year without difficulty, taking general gymnasium. Her health history this fall (1932) was that she had not been so well this summer, had felt tired the latter part but determined to return to college. On inspection of the record at the time of the physical examination a vital capacity of 154 cu. in. and a positive exercise test response was seen. As vital capacity is a function dependent on height rather than weight such a drop as this coupled with the failure of the pulse rate to come back to near normal after rest led to the presumptive conclusion of thyroid overactivity even before physical findings were noted. These showed a full thyroid, a systolic murmur transmitted to the axilla, pulmonic second sound accentuated, and a blood pressure of 148-82. Obviously this girl needs rest rather than activity in order to enable her to stay in college at all.

While clinical problems such as these are of great interest to the examiner the chance to see quite a large number of normal individuals, to review normal physical findings means much more. Practice in the technique of physical examination is always of value. Consequently such an opportunity as these examinations is welcomed.

No conclusions that could be generally applicable can be drawn from this report. This series of examinations over a ten year period shows that about fifteen per cent. of the girls in MacMurray College have some findings in their physical examination that call for corrective management ranging from rest to slight restriction from full participation. Some of these conditions are remediable, some are permanent. An attempt is made to rate the students' physical capacity and apply through proper methods those measures of management which will enable the individual student to improve her general health. These measures with the general program for class 1 students provide systematized physical education in one way or another for every student in MacMurray College.

PAIN IN RECTAL DISEASE*

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Pain is one of the ever present symptoms of rectal disease. It may be spoken of as but a discomfort or it may be agonizing suffering; it may vary in constancy and severity in different people or at different times in the same individual; it may be limited or widespread; and it may be direct or reflex; it occurs with all rectal ailments from a simple proctitis or a benign ulceration to an extensive neoplasm; and unless relieved it drives our patient to distraction, disturbing his peace of mind as well as his bodily comfort, interrupts his sleep, upsets his digestion by causing nausea, vomiting, flatulence, diarrhea or constipation, and thus directly interferes with convalescence. In many rectal ailments, notably cancer, the discomfort is slight at first but, later becomes torture, and even in lesser ailments such as hemorrhoids or fissure, the suffering of the present attack may be violent when earlier attacks have been accompanied with bearable pain.

For purposes of our present study let us classify the pains of rectal disease as

1. Visceral Pain
2. Referred Pain
3. Spasmodic Pain
4. Backache or Sacralgia.

New growths in the rectum obstruct the lumen of the bowel, or distend its walls; inflammatory lesions engorge the blood vessels of the parts and further fix and stretch the parts; and adhesions between the pelvic organs augment the tensions in the rectum by the binding and pressure of new fibrous tissue. Therefore deep seated pain is aching in character, continuous and constant in duration, and as the venous engorgement, the tension of the adhesions or the infection increases, the pain proportionately increases. It is elicted by pressure and is also made worse thereby. This visceral pain may be complained of in the abdomen in the form of colic.

Colic is a word used very loosely to describe any abdominal pain, especially of a kind which tends to wax and wane in intensity. Such pain may be associated with disease in almost any of the abdominal or pelvic organs. The word colic is applied quite commonly to the pain caused by the passage of irritating substances in the bowel although it may also refer to the passage of a stone down the bile duct (biliary colic) or the ureter (renal colic). It is better, however, to restrict the term colic, used without the qualifying adjective, to pain caused by contraction of the intestine, of a cramp-like nature, in an effort to rid itself of foreign body or poison.

As soon as the reflexes are excited by the rectal irritant, regardless of whether it is an inflamed anal fissure, an engorged hemorrhoid, an infected rectal ulcer, a dragging neoplasm or an impacted fecal ball, nature increases the peristalsis in an attempt to rid itself of the offender, and in this effort painful spasm of the bowel occurs. If these colicky contractions are forceful, vomiting, sweating and a degree of collapse is brought about with this digestive upset, above (cephalad) to the diseased rectum. The patient's temperature and pulse are not much disturbed and though the face exhibits an expression of pain, there is not the pinched, anxious facies so characteristic of grave rectal disease. In cancer of the pelvic bowel the obstruction may be but relative, the lumen being temporarily plugged by a passing fecal mass, the digestive upset promptly subsides, local tenderness and rigidity disappear and the clinical picture may be mistaken for that of simple colic or colitis.

Pain in the left hypochondrium may occur with a growth in the splenic flexure of the colon, or obstruction of it lower down. In some cases a tumor may be felt or signs of chronic obstruction be noted. Apart from a neoplasm, the mere accumulation of feces in the transverse and descending colon may cause a feeling of pain and weight in the left hypochondrium.

Carcinoma of the sigmoid colon or of the rectum may cause pain in the colon generally, owing to its distention with accumulated feces; sometimes this pain is complained of chiefly over the decending colon, and in the left iliac fossa. There may also be pain in the right iliac fossa occasioned by adhesions obstructing the sigmoid colon, or a partial volvulus, or a carcinoma of the rectum, or of the sigmoid colon, leading to partial intestinal obstruction and preventing feces from leaving the cecum thoroughly even when evacuant measures have been employed. The pain which the patient complains of may be not at the site of obstruction so much as in the right iliac fossa. It is noteworthy that when there is obstruction to the colon in its distal part, it is particularly in the cecum that stercoral ulcers are apt to occur, and these may be associated with perityphlitis and pain in the right iliac fossa, more or less simulating appendicitis.

Pain in the perineum is a symptom often mentioned by patients in giving their history of some affection of the genito-urinary organs, rectum or anus, but is usually only a dull aching, of which little notice is taken, as it is generally of minor consequence in comparison with other more striking symptoms. The complaint of perineal pain per se does not convey much information to the clinician, and it is practically never present as the only symptom in a case.

Referred pain of pelvic disease into the lower extremity is not recognized so often as is that of cardiac disease in the upper extremity. Disease of the rectum, bladder, prostate or uterus may, however, give rise to cutaneous pain and tenderness, chiefly in the fifth lumbar and sacral areas. A careful examination of the abdominal and pelvic viscera is necessary, therefore, in all cases of pain referred to the legs without obvious cause.

Superficial pain in the skin is essentially a referred pain, and may radiate very widely over the lower abdomen, down the groins, over the crest of the ilium and down the thighs. This area of the skin is commonly known as the "ovarian region" because referred pains are noted here in connection with uterine, tubal and ovarian disease, but this region may be involved in lesions of the colon and rectum and also the kidney, ureter and gall bladder. Consequently, referred pain in the skin in this region can be taken as indicative of disease in any one organ unless the influence of all other organs can be eliminated. All parts of this area are not necessarily affected equally, and there may be points of maximum intensity; one notably, is midway between the umbilicus and the an-

terior superior spine. This spot, especially on the left side, has often been taken erroneously to indicate pain due to ovarian or sigmoid inflammation. It is interesting to note that referred pain is commonly more marked on the left side of the body, the explanation of which is not quite clear.

Intestinal neuralgia is an uncommon disease and may be difficult to distinguish from colic as both are functional disorders without organic disease. Neuralgia may occur in an enemic, ill-nourished person of neurotic type, and may complicate the other pains of malignant or tubercular disease of the pelvic bowel. It arises without obvious exciting cause and may recur at the same time of the day with some regularity. The pain has not the cramp-like character of colic, but is aching, boring and darting.

Bearing down pain is an associate of many pelvic conditions. It is impossible in many instances to dissociate it from chronic aching pain; but it is not every chronic pain which has the bearing down characteristic. This dragging pain is usually the result of impaction of some pelvic structure, and owes its character more particularly to pressure on the rectum, and sometimes on the bladder. Displacement of pelvic organs, or even simple congestion of them, will sometimes produce it. Within the rectum its more frequent sources are cancer, ulcer or hemorrhoids. It is thus closely associated with rectal tenesmus. A pelvic abscess of peritoneal origin is an unusual impacted swelling which gives rise to very severe bearing down pain; impacted, because of the tension in it. The bearing down character becomes most marked if the abscess involves the rectal wall, as it so frequently does, causing a flow of mucus and much irritation of the rectum.

The differential diagnosis of the causes of this type of pain can be made only after a complete pelvic examination by abdominal palpation, and bimanual examination by the vaginal and by the rectal touch. Further, it may be necessary to examine the bladder by the cystoscope, or the rectum by the finger or the sigmoidoscope.

The pain occasioned by rectal disease in general and in cancer especially may be mechanical, or chemical or both.

1. *Mechanical*: The cancer cells are larger than normal cells of the same type of tissue and the increased volume content of the cells causes pressure upon the fine nerve fibrils distributed in the tumor thus causing nerve pressure pain. It is also possible that the increased volume of the cancer tissue may be the result of increased permeability of the cancer cells. Behan[1] suggests that this hydropic increase in size may be corrected to some extent at least by calcium, for he has noticed that under the administration of calcium the tumor becomes smaller. Thus, the increased volume content of the cells causing pressure upon the fine nerve fibrils in the tumor is reduced with reduction of nerve pressure and alleviation of the pain.

It has been observed that in cancer patients the blood serum contains less calcium and is changed in its potassium and chloride content, i. e., it contains proportionately more of these latter ions. It has also been demonstrated that slices of a transplantable tumor in an acid mixture imbibe water and that preliminary treatment with calcium solution restrained this imbibition. From the experimental standpoint, this is indicative that the volume of cancer tissue should be greatly decreased by calcium, and in the practical application would indicate the value of calcium intake as a means of reducing the volume-content of cancer tissue.

All rapidly growing tissues, whether cancerous or normal, as the embryo, the spleen, the testes, etc. have a higher degree of imbibition for water than have the slower growing tissues, and it is pertinent to remember that increased permeability is associated with the rapidity of growth of the normal tissues which most closely resemble cancer. Therefore, it may be accepted that increased volume of the cancer cells by reduction of cancer tissue volume does decrease the pressure pain.

Behan says:

Abnormal substances, causing irritation of the terminal sensory fibrils result from variations in the chemical constituents both of the tumor cells and of the surrounding tissue juices. These changes are the result of tumor activity, chiefly metabolic. The most active metabolic process in cancer tissue is the glycolysis of sugar with the production of lactic acid, carbon dioxide and water. To what extent the lactic acid is involved in the irritation of the sensory nerve terminals and the transmutation of impulses so produced into pain impressions is not yet determined. However, it must be accepted as a fact that the pain production in cancer tissue is associated with irritation of sensory fibers in and

around the cancer mass, and it is conceivable that this irritation is closely associated with disturbances in osmotic pressure and electrolytic changes. Disturbances of this character as sources of pain production are quite conceivable, if we compare them with the severe pain produced by osmotic changes intentionally induced as, for instance, the pain caused by the hypodermic injection into tissues of solutions not isotonic with the plasma of the tissues. When the osmotic pressure of a solution is higher or lower than that of the tissues into which it is introduced, pain always results. So too, in cancer, it is conceivable that the metabolites of the cancer cells of which lactic acid is most prominent are factors in producing disturbing and irritating changes in the surrounding media, or even in the cancer tissue itself. These changes, which are deleterious and destructive to the tissues of the affected area, must at least in part be the causative agents of the pain produced in these regions; therefore, in order to influence, at its source, the pain of cancer lesions, it is necessary to control or to regulate the metabolism of the cancer tissues. As the metabolism of cancer tissue is predominately that of glucose, regulation of this actively will to some extent control the pain.

The pain of rectal disease, benign or malignant, is very moderate at first, the nerves are but gently irritated, but later as the tumor enlarges or as the infection spreads the tension and pressure are severe and the suffering is agonizing. Within the bowel the discomfort is a feeling of gas rolling about or colic; in the rectum a fullness or heaviness; in the perineum, of itching, burning or crawling; and in the pelvic structures a weakness, tired sensation or dull ache.

Treatment: Locally, for the backache or iliac discomfort, the belladonna plaster is sedative. Too large a plaster should not be used at once, as the atropine in the plaster can be absorbed and cause belladonna poisoning.

During the day while our patient is otherwise occupied the pain may be dismissed, but at night it interrupts his sleep and as slumber is our most refreshing agent it must be provided. Therefore as soon as our patient mentions restless, sleepless nights, his discomfort demands our immediate and constant consideration. Proctologic patients, if carefully interrogated, all complain of more discomfort at night. They cannot find a comfortable position or are soon awakened.

Tincture of gelsemium, 5 minims in a tumbler of hot water upon retiring is mildly depressant; it lowers the plood pressure, slows the heart and depresses the irritability of the spinal cord and nerves, both motor and sensory and is an especially efficient sedative. It is excreted rather rapidly by the kidneys and therefore is not cumulative or hang-over in effect. This drug, though very satisfactory, has lost popularity to the coal-tar derivatives, especially acetylsalicylic (aspirin), or the barbituric acid preparations (Sodii Barbital grs. 5). No one preparation is continually effective beyond a short period but as the number of official and proprietary hypnotics is legion, changes may be rung as frequently as needed.

When our patient's paroxysms of pain disturb his eating his meals a tablet of 5 grains of aspirin one-half hour before meals has a calmative effect that usually permits the invalid to ingest a substantial meal.

Many cancer patients come sooner or later to use codeine or morphine, and often in increasing doses; one of my recent patients used 3 grains of morphine daily.

The hypnotic and narcotic drugs are a great mercy to our cancer sufferers and must not be withheld. The judicious utilization of these drugs for the relief of symptoms is however always important. The matter of developing a habit is secondary.

The study of the chemical changes in the neoplasm itself, in the tissues of the host and in the components of the blood is bringing out some interesting information regarding calcium therapy as regards the cancer tissue and the control of pain.

Behan[1] reports some surprising results with calcium in reducing and in some instances completely alleviating the pain of those suffering with inoperable cancer. Calcium gluconate is used, 1 gram intravenously every day, or it may be given by mouth so that the absorption from the intestinal tract will provide a constant reservoir of supply. A larger dose (2 gm. of calcium gluconate three times daily) is necessary if given orally. In order to stimulate the absorption of the calcium, cod liver oil with viosterol is also supplied the patient, the dose being one-half ounce of cod-liver oil, in one dose, once a day together with ten drops of viosterol. If the calcium intravenously is going to be of benefit it will show results within five or six injections given over a period of a week or eight days. I have had a few reactions of chills and body tremor after the first injection of calcium gluconate.

No disagreeable effects of hypercalcemia were noted, although sometimes loss of appetite or slight malaise did occur. When these appeared the calcium given by mouth was immediately discontinued.

Sauerbruch holds that shifting of tissue reaction to the acid side induces leukocytosis and improved phagocytosis, and changes dissociation of calcium and potassium ions. Spiro[2] showed that calcium caused increased acidity and noticeable depletion of water content of tissues. Dubois and Stolte[3] showed that vegetable diet, rich in potassium, increased retention of calcium. Bogert and Kirkpatrick demonstrated that acid forming foods increased while base forming foods retarded calcium absorption and retention.

It should be remembered that vitamin D is a potent agent in the mobilization of calcium in the system and therefore such foods as egg yolk and cream should be given.

Ultra-violet irradiation causes an increase of the serum calcium in the blood. This may also explain the beneficial effect of this type of irradiation on pain. H. Humphries in "Artificial Sunlight and Its Therapeutic Uses" published by the Oxford Press, 1924, states that "it would appear that the ultra-violet ray exerts some biologic action in the vicinity of irradiated inter-epithelial nerve fibrils.

In whatever way relief from pain is brought about, and whatever may be the mechanism involved in effecting analgesia, it is an important therapeutic property of ultra-violet energy to allay pain, a property apparently little known and less used.

Extract of parathyroid gland will increase the calcium content of the blood and at the same time decrease the electrical excitability of the nerves. Berman, L. (A. J. Physiology, 65:358, 1926). The parathyroid extract markedly increases the ion-diffusible calcium in those in whom this form of the element is low.

Behan observed that parathyroid, when given to a patient, increased the serum calcium at the expense of the calcium which was present in the bones, and most enlightening in this respect was the observation that the only patients in whom bone metastases developed, while they were under calcium treatment, were those to whom parathyroid extract had been given. An association between reduced calcium content of the bone and bone metastases seemed to be definitely indicated; therefore, we have discontinued the use of parathyroid extract in the treatment of cancer patients.

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STOMACH—COMPARATIVE ANALYSIS OF GASTRIC CASES OBSERVED FOR PERIOD APRIL 1925-APRIL 1932

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By way of explanation it is perhaps best to mention that the reason for choosing the above period for comparison is because April, 1925, is the opening date of the Research and Educational Hospital of the University of Illinois. Several reasons prompted this comparison: first, it seemed interesting to know approximately just how our institution compares with other institutions as to the number of cases observed; secondly, we wanted to compare the incidence ratio between male and female patients, and lastly, we were attempting to establish an explanation for the apparently misleading statistical data to which the average medical student is exposed. For this purpose we chose to study the records and histories of three well recognized institutions: The Mayo Clinic, The Grant Hospital of Chicago, and the Research and Educational Hospital of the University of Illinois.

It is perhaps advisable to state that while Grant Hospital in its makeup is different from the Mayo Clinic and the Research Hospital it is to advantage to include that institution in the comparison inasmuch as it serves to bring forth certain information not made evident in the data of the other two institutions.

This report is based on a review of two hundred and fifteen (215) cases of the Grant Hospital and twelve hundred and eighteen (1218) cases at the Research Hospital. Through the courtesy of the gastro-intestinal section of the Mayo Clinic we obtained classified data of 17,799 gastric cases.

TABLE 1

COMPARATIVE SUMMARY OF GASTRIC CASES FOR PERIOD APRIL 1925—APRIL 1932 SHOWING INCIDENCE RATIO AND CONFIRMED RATIO

	Gastric Carcinoma			Duodenal Ulcer			Gastric Ulcer		
	Research Hospital U. of I.	Mayo Clinic	Grant Hospital	Research Hospital U. of I.	Mayo Clinic	Grant Hospital	Research Hospital U. of I.	Mayo Clinic	Grant Hospital
Male	169	1,377	39	830	10,500	127	77	1,875	18
Female	27	422	21	86	3,500	4	29	625	6
Ratio of Incidence	6/1	3/1	2/1	10/1	3/1	32/1	3/1	3/1	3/1
Confirmed Ratio	5/1	3/1	2/1	11/1	3/1	16/1	3/1	3/1	6/1

All cases were grouped as gastric carcinoma, duodenal ulcer and gastric ulcer and again subdivided into male and female groups.

In Table 1 you will note that we classify the averages into "Ratio of Incidence and Confirmed Ratio." In calculating "Ratio of Incidence" we include all cases that are diagnosed clinically, while in calculating "Confirmed Ratio" we include cases in which clinical diagnosis was confirmed by either surgery or autopsy or by both. Classification as just outlined was not possible in the cases of the Mayo Clinic inasmuch as we were unable to obtain such information at this time.

In Table 2 we classify the individual groups of gastric cases of the Research Hospital in detail as to average age, duration and so forth. One very often wonders if an extensive and laborious effort of this kind ever balances the amount of information obtained from such studies or from studies of similiar nature that have been published or will be published in the future undoubtedly as individual reports.

As a general proposition one must be ex-

TABLE 2

CLINICAL SUMMARY (DETAIL) OF CASES OF DUODENAL ULCER, GASTRIC ULCER, AND GASTRIC CARCINOMA OBSERVED AT THE RESEARCH HOSPITAL FROM APRIL 1925 TO APRIL 1932

	No. of Cases	Average Age	Average Duration	Average Wt. Loss	No. of Cases Operated	No. of Cases not Operated	Average H.B. %	Average Erythrocyte Count
DUODENAL ULCER								
Male	830	37	3 yrs.	22 lbs.	54	776	70	4,100 thousand
Female	86	39	1 yr.	25 lbs.	5	81	50	3,500 thousand
GASTRIC ULCER								
Male	77	40	8 mo.	20 lbs.	8	69	60	3,800 thousand
Female	29	43	4 mo.	31 lbs.	3	26	55	3,400 thousand
GASTRIC CARCINOMA								
Male	169	57	2¼ yrs.	27 lbs.	22	147	50	3 million
Female	27	57	2 yrs.	25 lbs.	5	22	60	3,200 thousand

tremely cautious in the interpretation of statistical data of any nature. It is particularly true when one is attempting to interpret statistics originating from a private hospital and comparing parallel statistics that come from an institutional clinic or a teaching hospital. What I mean is simply this—a case in a private hospital may receive considerable personal attention yet have little or no "work up" to confirm the clinical diagnosis; this while obvious for many reasons will alter matters considerably by comparison. Averages of positive gastric lesions in private hospitals are to my understanding, therefore, considerably higher than those of institutional or teaching hospitals. This is also obvious when one recalls the comparatively small percentage of autopsies obtained in private hospitals.

Again some clinics are so situated, I mean by reason of their geographical location or particular nature of their work, that their patients come to them for care after an illness of prolonged duration and therefore a surgical confirmation or an autopsy is frequently the bulk of their statistical evidence (confirmed ratio).

Another point of vital importance in this connection is proper evaluation of statistical data with reference of male to female ratio.

In Table 1 the ratio of male to female duodenal ulcer was eleven to one at the Research Hospital, three to one at the Mayo clinic and sixteen to one at the Grant Hospital.

In making a comparative study of ratios in various text-books it is particularly noticeable that the trend of opinion since 1920 has changed considerably. When I was in school we were taught that the ratio of male to female (duodenal ulcer) was two to one or three to one. All standard text-books favored that ratio. When the new edition of text-books was published the ratio was changed to four to one. During my interne year, my fellow internes and I often discussed the fact that while all standard text-books claimed a ratio of three to one or four to one for duodenal ulcers, we actually have not been able to confirm that ratio either in the hospital or the outpatient service. Ever since then I have had the feeling that the ratios were incorrect and began to teach to the students the probability of a higher ratio being more accurate. About five years later a new edition of Stevens' Practice of Medicine was published in which the ratio was given as six to one. It is true, however, that considerable literature on the subject has been published, giving a lower ratio. Taking those publications and text-book reports for their face value it is far from being clear to the average reader as to the reason for these variations, inasmuch as very often no definite explanation is given as to whether or not those ratios originated in a medical or surgical clinic or whether or not those ratios were ratios of incidence or confirmed by surgical exploration or autopsy. Up to the present time I am still not convinced that duodenal ulcer in the female is as frequent as one is lead to believe. One other observation must be considered; duodenal ulcers very often discovered at autopsy in cases that have not been operated on are in reality not clinical ulcers inasmuch as these patients never presented symptoms of ulcer nor any other gastro-intestinal complaint; therefore, if such information is included the ratio will of necessity be exaggerated. Attention should be given in this direction. To substantiate what I have said I wish to quote the following:

In Osler's Modern Medicine (McCrae) 1926, Martin states that statistics in regard to gastric ulcer are on the whole of very doubtful value; statistics on sex vary greatly and one should not attach too much importance to individual reports. As to geographical distribution Rutimeyer states that it does not seem possible to obtain useful statistics on regional distribution. (P. 508)

Crohn (1927) in his book on "Affections of the stomach" states that "Sex is an important factor in studying the comparative incidence of ulcers, for gastric ulcer occurs not often in women, while duodenal ulcer is found almost always in men, being rare in women."

Rehfuss (1927) in "Diseases of the Stomach" (P. 655)—states that duodenal ulcer is present in four or five to one ratio (male to female).

It seems that the information at hand at the present time on ratios is so variable and indefinite that it is almost advisable not to publish individual statistical reports in standard text-books.

In order to stimulate a little interest in this matter among the senior students in my clinic I often stated that I would gladly pay a dollar

for every duodenal ulcer in a female patient that any student would find. I really felt that a statement of that type would be interpreted by the students as a challenge and would naturally bring results. At the end of several years not more than three apparent cases were discovered, two of which had gall bladder disease and a third had a large ovarian cyst.

The real detriment that is being done is that it teaches the student to diagnose duodenal ulcer in a female patient when he should be considering gall-bladder disease first. One sees this mistake in private practice almost daily. I am hoping that some day some sort of a statistical bureau will be established within the American Medical Association where all material for publication, as articles of this nature, could be carefully checked and examined before releasing it to the publisher, for any text-book.

I am sure that considerable can be accomplished for mutual benefit, if individual reports of a statistical nature were properly compiled and classified; a centralized unified report would be kept up to date to be recognized as official for various geographical districts in the states and would obviate all misunderstandings as they arise at present.

CONCLUSION:

1. I believe that the male to female ratio in duodenal ulcer is considerably higher than is generally acknowledged at the present time.

2. The ratio is probably about twenty to one or thirty to one (male to female) confirmed ratio.

3. Careful consideration of all medical statistical data by a centralized body before publication would be invaluable.

4. The statistics obtained in this report point to a higher male to female ratio.

I am thankful to Dr. George B. Eusterman of the Mayo Clinic for permission in the use of statistics on this subject from his department. I also wish to thank Miss Mabel C. Root of the Mayo Clinic, Miss Lydia Conrad of the Research Hospital and Miss Laura Tegge of the Grant Hospital for their cooperation.

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HELPING WIFE

At a lecture for men, the speaker stated that the average wife needed her husband's aid in the home.

"I always help my wife," he said. "When she mops up the floor, I mop up the floor with her."

And he wondered why the audience laughed.

REPORT OF A CASE OF CHRONIC PANCREATITIS WITH PANCREATIC CALCULI

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The case history, which I wish to present, discloses many interesting features for us in that the patient suffered from a number of diseases notably, pancreatitis and pancreatic calculi and ran a chronic course to a gradual termination in death.

According to statements made by the patient which were somewhat inaccurate, she had been suffering from incontinence, glycosuria and polyuria; these complaints were later substantiated by findings in the hospital. She also gave a history of morphine addiction for three years previous to admission, for which reason she was committed and was diagnosed "Without Psychosis."

The physical examination on admission revealed a poorly developed and emaciated negro female, fifty-four years of age. The pupils were regular and equal, reacted sluggishly to light but readily to accommodation. Heart findings were essentially negative. Blood-pressure was 114/82. The lung findings were those of a far advanced pulmonary tuberculosis involving apices.

Laboratory examination revealed four plus Wassermann and Kahn reactions on blood serum, and the urine repeatedly showed positive tests for sugar and albumin; no acetone was present.

Insulin was administered but seemed to be of little avail in combating the glycosuria. Diabetic diet was instituted but the patient refused to cooperate. At this time she was diagnosed diabetes mellitus, pulmonary tuberculosis (far-advanced), chronic nephritis and syphilis. The patient expired four months after her admission, the cause of death being diabetes mellitus.

A post-mortem examination was performed a few days later. The body was then in an extreme state of emaciation. The thyroid gland was normal except for some cystic degeneration

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of the isthmic lobe. Both lungs were noted to be bound down to the pleura by firm fibrous adhesions. The middle lobe of the right lung contained a large cavity lined with a granular membrane. The cavity involved almost the entire lobe and extended into the apex by a sinus tract measuring one-half cm. in diameter and perforating through to the pleural space of the apex; the perforation measuring one and one-half to two and one-half cm. Pus was contained in a pleural space of the right lung. Patchy consolidation was noticed throughout the lower lobe, circumscribed about the bronchioles. The left lung was of a similar appearance, containing numerous sinus tracts connecting the lower and upper lobes, multiple small cavities being present throughout; the bronchi contained a purulent exudate. Calcified nodules were common throughout both lungs. The tracheal and peri-bronchial lymph nodes were caseous throughout. The heart was small and tubular in type. The coronary arteries were everywhere sclerosed, with atrophy of the myocardium. The liver weighed 1550 grams and occupied one-fourth of the entire abdomen; the parenchyma was of a dark red color and presented evidence of fibrosis in the inter-lobular spaces. Each kidney weighed approximately 260 grams, presenting evidence of a chronic interstitial change; they were granular appearing and presented contracted fibrotic areas throughout the cortex and firmly adherent capsules. The gastro-intestinal tract showed evidence of a chronic disturbance of the peritoneum with a chronic inflammatory change in the mucosa of the intestines; the lumen being filled with feces.

On endeavoring to isolate the common bile duct and the pancreas, great difficulty was encountered and this case report is founded on what was then discovered. Palpation revealed the presence of several firm masses in the region of the pancreatic duct. The greater omentum was everywhere firmly adherent to the transverse mesocolon and duodenum with obliteration of the lesser peritoneal sac, and the foramen of the lesser sac could not be found. Everything was so firmly adherent that it was almost impossible to isolate the pancreatic duct, but after a careful dissection of this region it was found that the pancreatic tissue was practically absent and that Wirsung's duct was all that remained, with some scattering of the parenchyma, still adhering to the wall of the duct. The lumen of the duct was markedly dilated and thickened throughout its entire course and somewhat tortuous, but narrowed down considerably where it entered the common duct. After opening the duct, within the lumen were found four coral-like, spiculated, marble-hard rotund stones measuring two to three cm. in diameter and completely occluding the ostium of the duct. There was a marked thickening of the mucosa measuring up to one-half cm. in places, and there was rugation. No parenchyma could be successfully isolated. The gall bladder was firmly adherent to its surrounding structures and densely bound down, but was free from stones.

The anatomical diagnosis was:

1. Chronic Pancreatitis with Calculi.
2. Bilateral Pulmonary Tuberculosis with Cavitation and Ulceration.
3. Pyothorax.
4. Syphilitic Hepatitis.
5. Chronic Interstitial Nephritis.
6. Chronic Inflammatory Peritonitis.
7. Chronic Gastro-enteritis.

The summary is as follows: It is interesting to note that this patient presented an unusual number of complications. That the pancreatic stones were probably only a part of the picture is true, but the fact that they were there is a rarity. The persistent uncontrollable glycosuria that this patient presented was undoubtedly due to a decrease of the pancreatic islets with consequent hormone loss. This might be termed traumatic diabetes or glycosuria, for the pressure of the enlarging calculi plus the presence of a chronic peritoneal change with unexpandable adhesions were the factors concerned in the production of pressure necrosis. The calculi were probably formed as the result of stasis due to paralysis of the autonomic nervous system during the course of first an acute peritoneal inflammation, and then a chronic change. Since these calculi are mostly composed of pure calcium carbonate and epithelial cells for the nucleus, there must have been a deposition of the calcium salts within the duct, normally present in the pancreatic secretion, acting as a synergistic activator; also calcium is ever present in visceral inflammation.

Pancreatic calculi occur infrequently, prob-

ably once in a thousand cases of pancreatitis, itself a rare disease.

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PYURIA IN CHILDHOOD*

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The presence of pus in the urine usually means infection somewhere in the urinary tract. The infection may involve all the urinary organs or only the kidneys, the kidney pelves, the ureters or the bladder. It is usually impossible to localize the infection in any one organ of the urinary system by the clinical symptoms or the physical findings which may be present. For this reason it seems better to call a urinary tract infection with pus in the urine a pyuria rather than a cystitis, pyelitis, etc., except in those instances in which a specific diagnosis has been made after urologic investigation. In accordance with this, the term pyuria will be used in this paper instead of pyelitis, etc.

It is important to know how much pus must be present in the urine to constitute a pyuria. To estimate the number of pus cells in a specimen of urine does not require any elaborate or difficult laboratory procedure. The urine should not be centrifuged. A drop of urine is placed on an ordinary clean glass slide, placed under the microscope and the number of white cells counted or estimated per low power field. A normal urine will usually contain several pus cells. A few more cells may be normally present in the urine of girls than of boys. No hard and fast rule can be made as to the number of cells which must be present to establish the presence of a pyuria. In general it can be said that when fifteen or more white cells are found per low power field in an uncentrifuged fresh specimen, a pyuria is present. However, when only the low limit of around fifteen cells is present, it is advisable to examine another specimen and to take into consideration the symptoms before making a diagnosis of pyuria. It is also necessary, when a small number of cells are present, to know whether they come from a vaginal discharge rather than from the urinary tract. It is not necessary to have clumping of the cells although this is frequently present. A diagnosis should never be made by gross examination of the specimen of the urine. Cloudiness and sediment may be due to phosphates, urates or oxalates as well as to large amounts of pus, especially when the urine has been allowed to stand for a few hours or to become very cold or decomposed.

The collection of urine for examination should not be difficult. Infants and young children urinate frequently, and by watchful waiting the mother or nurse can usually obtain a specimen. It is advisable to cleanse the genitalia before obtaining the urine. If necessary, a test tube can be taped over the penis or vulva or in girls a special small glass urinal cup can be used. Catheterization of the bladder is rarely indicated. It has its greatest usefulness in obtaining urine for the identification of the infecting organism, in determining when a sterile urine has been obtained in chronic pyuria and as a diagnostic procedure in the differentiation of supra-pubic tumors. In the usual case of acute pyuria, catheterization is not indicated. These children urinate frequently enough to obtain specimens easily, the type of infecting organism does not influence the medical treatment and the urine usually becomes sterile when the pus has disappeared. The above, of course, applies only to the usual case of acute pyuria and not to cases of chronic or recurrent pyuria. Catheterization should

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always be carried out with the most aseptic precautions. If, for any reason, urinary stasis due to obstruction is suspected, catheterization should be undertaken with hesitancy because infection, if not already present, will almost invariably follow even though the most aseptic precautions have been taken. The element of trauma must also not be overlooked.

Acute and Chronic Pyuria.—Cases of pyuria can be roughly divided into two groups, depending upon whether they are acute or chronic infections. The acute ones make up by far the majority of all cases of pyuria. The usual acute case lasts for a period of two to three weeks and will get well with or without medical treatment. In the chronic cases, the picture is a very different one. In these the infection may be associated with some other anatomic lesion such as obstruction wtih urinary stasis or urinary calculi, etc.; or such chronic infections as tuberculosis may be present. There are also certain cases of pyelitis or cystitis, as proved by urologic examination, due to chronic pyogenic infections, which are not affected by medical treatment or in which such treatment has been inadequately carried out.

Some infants and children have a recurring pyuria. The recurrence in some cases is due to a true re-infection of the urinary tract. In other cases, there is only a relapse of the clinical symptoms while the urinary infection persists between attacks. This return of the symptoms may be due to the fact that a cure was based upon the disappearance of the fever and the dysuria, and not upon the absence of pus cells in the urine. In some cases, the pus cells disappear from the urine during treatment, but a bacilluria persists which again causes a pyuria after treatment has been discontinued. For these reasons, Helmholz always requires negative urine cultures before pronouncing a cure. Unless the urine is examined until it is found normal, it is difficult to tell whether a recurrence of symptoms is really due to re-infection or due to a flare-up during the course of a chronic pyuria.

Age and Sex.—Urinary tract infection with pyuria is mainly a disease of infancy and early childhood. Its frequency is second only to that of upper-respiratory tract infections and gastro-intestinal tract infections. It is not common during the first few months of life but its frequency rapidly increases up into the first half of the second year. After this age, the incidence decreases fairly rapidly so that during later childhood it is again only fairly common.

Sex plays a definite role during infancy when pyuria is most often encountered. In the newly-born infant pyuria is found as often if not slightly more often in boys than in girls. From then on, into the first quarter of the second year, from 70 to 90% of the cases occur in girls. After this period it is found about equally often in boys and girls. The influence of sex applies only to the usual case of acute pyuria. The cases in which a severe pyonephritis or urinary stasis with obstruction is present are as frequently seen in boys as in girls, no matter what the age of the patient may be.

Mode of Infection.—The mode of infection is the same in both the acute and the chronic pyuria. Urinary stasis may have some influence on the ease with which infection takes place, but its greatest influence is upon the chronicity of the infection and the resistance to medical treatment.

The experimental work of Helmholz[1] and others has definitely proven that pyogenic organisms are not normally present in the urinary tract. The infecting organism then must gain entrance from some source outside of the urinary tract. The three possible routes of infection are 1. the ascending by way of the urethra into the bladder, 2. the hematogenous, and 3. the route through the lymphatics. There are many theories in support of each of these routes by which infection may take place, but it must be clearly understood that the mode of infection producing the pyuria in individual cases is usually not known, nor has the primary site of the infection been definitely established.

In favor of the ascending route of infection is 1. the frequency with which pyuria occurs in girls during the diaper age, 2. the frequency of pyuria when diarrheas are present and 3. the frequency of the colon bacillus as the infecting organism. In baby girls the urethra is short and of relatively large calibre and the exposed genitalia are in frequent contact with fecal material during the diaper age. It is during this period that pyuria is most commonly present with a 70 to 90% incidence in girls. During the course of a gonococcus vaginitis ascending infection may take place, but this

seems to be rare. It may also occur after trauma to any of the urinary organs or as a result of infection from foreign bodies in the urethra or in the bladder. Ascending infection also may occur following catheterization of the bladder. This is invariably the case if urinary stasis is present.

There are many theories favoring the hematogenous route of infection. It is believed that organisms can pass through the kidneys without setting up an infection there. In support of this can be cited the finding of the typhoid bacillus, the colon bacillus and rarely the tubercle bacillus in urines that are otherwise negative. Cabot and Crabtree[2] have been able to demonstrate positive blood cultures preceding urinary infection with the colon bacillus. Kowitz[3] found the colon bacillus in the urine and in the blood in several cases of infectious diarrhea. It has further been shown that colon bacilli are absorbed from the gastrointestinal tract, carried into the blood stream, and are either destroyed there or excreted through the kidneys.

In general septicemia we know the organisms are carried through the blood stream. The pyuria when present is due to a generalized or to a focal pyonephritis. While it would seem plausible to assume that kidney abscesses are always accompanied by a pyuria, such is not the case. The abscesses may become walled off or they may be so located that they do not break through the renal tubules, with the result that no pus cells will be secreted with the urine.

Pyuria is of frequent occurrence during the course of or following after the upper respiratory tract diseases. This is especially true when throat infections, otitis media, cervical adenitis and sinusitis are present. It may also occur with pneumonia, the contagious diseases (principally measles, chickenpox and scarlet fever) cellulitis, osteomyelitis and the pyogenic skin infections such as impetigo. Tuberculosis of the kidney is never considered a primary infection but secondary to some other focus. It is believed that any form of infection, whether acute or chronic, may become an etiologic factor in urinary tract infections. When pyuria does occur during the course of any of the above diseases, a septicemia is rarely evident but the hematogenous route of infection would seem to be the easiest explanation of its occurrence.

Urinary tract calculi, which are found fairly frequently during childhood are practically always accompanied by a pyuria and a hematuria. The trauma to the tissues and the urinary stasis which may be caused by the calculus offers a favorable medium for infection by both the hematogenous and the ascending route. Kidney tumors are frequently accompanied by a hematuria, but peculiarly, infection and pyuria rarely are present. A pyuria is rarely found with a perinephritic abscess although the infection is probably hematogenous in origin and the inflammation not only surrounds the kidney but may even extend through the renal capsule.

The theory of the lymphatic route of infection is based upon the existence of anastomosis between the lymphatics of the bowel and of the kidney. Proof of this route of infection is still wanting but it is probable that in some cases of pyuria the infection has been carried through the lymphatics.

How little is known of the mode of infection and of the primary seat of the infection is born out by those cases of pyuria which seem to develop as primary infections of the urinary tract. These apparently primary infections are the ones most commonly seen in baby girls during the diaper age when pyuria most frequently occurs. They occur in otherwise healthy children and as far as we know they are not secondary to or complications of infection elsewhere in the body. In contrast there are those older children with marked hydronephrosis and urinary stasis, who have passed through infancy and who have experienced the usual upper respiratory tract infections and contagious diseases without developing a pyuria. All the factors are present which we believe should influence a urinary tract infection and yet a pyuria does not occur. Whether or not functional urinary stasis occurs or is a factor in the development of an acute pyuria is not known.

Infecting Organisms.—The organism found in about 70% of the cases of pyuria is some member of the colon group. Other common bacteria which may be present are the staphylococcus, streptococcus, bacillus pyocyaneus, bacillus proteus, and more rarely, the tubercle bacillus and the gonococcus.

Symptoms.—The symptomatology accompanying a pyuria varies not only with the age

of the patient but also in acute and chronic cases. In infants the symptoms are general in nature. There is usually an acute onset with high fever and at times a convulsion. The temperature often reaches 105, does not usually remain constant but fluctuates over a wide range, gradually subsiding as the amount of pus in the urine decreases. Occasionally no febrile reaction is present. A chill may accompany the high fever and when present is nearly pathognomonic of a pyuria as it occurs so rarely in other childhood diseases. Pallor, restlessness, irritability and crying—the latter especially upon urination—are of frequent occurrence. The above general symptoms may be those of any acute infection. Because of this a urinanalysis is imperative in any unexplained fever. In the older child local symptoms are also usually present. They consist of dysuria, urgency, frequency and often tenderness over the bladder or kidney regions. When cystitis is present the local symptoms are usually more severe than when only the upper urinary tract is the seat of the infection.

In cases of chronic pyuria the fever, dysuria, etc., may be present only at irregular intervals simulating a recurrent acute pyuria. There may be long periods when only a low grade fever is present and even this may be absent. The physical examination may lead one to suspect the presence of some obstructive lesion in the urinary tract. A suprapubic tumor which disappears upon bladder catheterization, which is associated with dribbling and incontinence, should make one suspicious of a bladder neck obstruction or of a cord bladder. A tumor in one or both kidney regions might indicate a polycystic kidney, a hydronephrotic kidney or a kidney tumor. Palpable enlarged tender kidneys may signify the presence of a pyonephritis. A sausage-shaped tumor mass crossing the midline in the region of the umbilicus may be due to horse-shoe shaped kidneys with fusion at the lower poles. Hydronephritic ureters are seldom palpable. When an anomalous ureter empties outside of the vesical sphincter there is constant wetting of the diaper or of the clothes.

Pathology.—The pathology in cases of pyuria varies both in the degree and in the site of the inflammatory reaction. Very little is known of the pathology of the simple acute type of pyuria, the so-called primary urinary infection, because these patients rarely die from such an illness. In patients who have died from some other cause the whole urinary tract may be negative or at most there may be a few hyperemic areas in the lining of the pelves, ureters or bladder. In other cases there may be a definite inflammatory reaction, either mild or severe, involving the walls of the pelves, ureters or bladder. Even a definite inflammatory hyperplasia of the tissues may be present. If obstruction is present, the inflammatory reaction is usually more marked than when stasis is not present and there is muscle hypertrophy as well as dilatation above the site of obstruction. Wilson and Schloss[4] stated that there is always infection of the kidneys when a pyuria is present. We have not found this to be true as in some cases that we have been able to examine postmortem the kidneys showed no evidence of infection. When the kidneys did show infection it seemed to be of two types. In the definite blood stream infections there was a generalized pyonephritis or cortical and medullary abscesses. When the infection was an ascending one following catheterization, for instance, the inflammation was most marked in the medullary portion of the kidney adjacent to the pelves and calyces. The cortical portions of the kidney were normal. In cases in which the obstructive lesion was unilateral only the kidney on the same side became infected.

DISCUSSION

The majority of patients with pyuria are brought to the physician because they are ill, they have the symptoms of an infection. A smaller number seek medical aid because of local urinary symptoms or abdominal tumor masses. Examination of the urine becomes just as important as examination of the ears or of the throat. It is only by means of such an examination that the correct diagnosis can be made. If a pyuria is present and there is an absence of an abdominal tumor mass, medical treatment should be instituted and continued until the urine and temperature become normal. In the usual acute case this will be a matter of two to three weeks. If medical treatment has been adequate and the pyuria still persists, or becomes recurrent or the physical examination points toward an obstructive lesion such as hydronephrosis, bladder neck

obstruction, etc., then further examination by urologic investigation becomes necessary for the proper diagnosis.

Acute cases of pyuria should not be referred to the urologist or undergo urologic investigation until adequate medical treatment has been tried. These cases are a medical problem and should be so treated. This throws the responsibility upon the general practitioner and the pediatrician where it belongs. They must diagnose the pyuria, and they must recognize or suspect the presence of anatomic lesions causing urinary stasis. They must judge which cases should go to the urologist and when. Due to the advances in urologic methods and technique even infants a few day of age may now have a fairly complete urologic examination with comparatively little danger. Intravenous pylography should be a tremendous aid to the diagnosis of urinary tract pathology without instrumentation in these young children.

Urinary stasis undoubtedly increases the possibility of infection but when infection does take place it always causes a chronic pyuria. Stasis is dependant upon obstruction. The common sites of obstruction are 1. in the posterior urethra due to valves, 2. at the bladder neck due to bars, 3. in the uretero-vesical region, 4. at the uretero-pelvic junction, 5. at the point where anomalous renal vessels may cross the ureter and 6. at the distal end of anomalous ureters. Stasis also occurs with a cord bladder. The above abnormalities are all congenital anomalies and they are the most frequent cause of stasis in children. The acquired obstructive lesions are less common and are usually due to the pressure of retroperitoneal tumors either upon the ureters or the bladder. Acquired ureteral or urethral strictures are reported rarely. Urinary calculi are fairly frequent and may cause stasis. Phimosis has been reported as a cause of urinary stasis but upon more complete study of such cases it will undoubtedly be found that some obstruction in the posterior urethra or at the bladder neck has been overlooked.

That urinary tract abnormalities are of frequent occurrence is born out by the large number that are reported. In necropsy series the incidence has been reported as from 1.2 to 12 per cent. In a study of 99 urinary tract abnormalities occurring in infants and children it was found that about half of them were congenital obstructive lesions with urinary stasis. The lesions were first recognized at all ages from birth into later childhood, indicating that the infection may occur at any age although the obstruction is present from birth. Bladder neck obstructions and posterior urethral valves are invariably found in boys. This is not only true in our own experience but also of cases reported in the literature.

In closing I want to stress just four points:

1. The urine of every sick child should be examined.

2. The medical treatment of all cases of pyuria unless symptoms or physical findings of some obstructive lesion are present.

3. The complete urologic investigation becomes necessary in all cases of chronic or recurrent pyuria. These children should not be followed or treated medically for months or even years without the benefit of such an examination.

4. When a pyuria is present, the urine should be examined until it becomes negative. Check-up examinations at later dates should then be made.

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RUPTURES AND TEARS OF MUSCLES AND TENDONS OF LOWER EXTREMITY

Edgar Lorrington Gilcreest, San Francisco (*Journal A. M. A.*, Jan. 21, 1933), presents the case histories of fifteen persons with partial or complete ruptures (tears) of the muscles and tendons of the leg. He believes that these ruptures occur more often than is generally supposed. An early diagnosis should be made if possible. Joint symptoms, particularly in the knee, should not mislead one in the diagnosis. Early surgical repair in extensive or complete tears saves much time and gives a much better ultimate result. The prognosis usually is good if proper treatment is given early.

Explorer: "You shouldn't complain. When I was in the arctic I used to live on candles and blubber."

Friend: "Well, if I had to eat candles I guess I would too."

AMAUROTIC FAMILIAL IDIOCY*

Tay Sachs' Disease

JULIUS F. MEYER, M.D.
CHICAGO

In 1881 Warren Tay[1] described symmetrical changes in the region of the yellow spot in each eye of a child.

In 1887 Bernard Sachs[2] described a form of blindness associated with idiocy with special reference to its cortical pathology (arrest of cerebral development). He later published a brilliant chapter recognizing the familial character of the disease and designated it as amaurotic familial idiocy.

Higier[21] was the first to propose the name of Tay Sachs' Disease. In later years particularly, Kingdom,[3] Russel, and Hirsch have laid stress upon the degenerative character of the disease. That the degeneration will set in wherever normal growth is arrested but life continues; that these children are born with limited and restricted capacity for normal development; that the gray cells may do as well as in any other child up to six months, but beyond that age the power for development ceases and degeneration sets in.

Recently Pelizaeus[4] described a condition called aplasia axialis extracorticalis congenita occurring in older children, from the third to fifth year resembling closely amaurotic familial idiocy. These children live longer and some may attain adult life.

Schaffer[5] was the first to describe the characteristics and pathognomonic ganglion cells in the entire nervous system. Optic atrophy and blindness occur, but no cherry red spots are observed.

Etiology: The disease is unquestionably of familial incidence. Sachs first regarded this disease as a congenital morbid process and later combined it with a degenerative abiotrophic change. (Lack of vital nutrition).

Gowers suggested the term abiotrophy which indicates arrest of normal development followed by degeneration. According to Gower, various parts of the nervous system have their own vitality, some of them may undergo a slow decay of the elements of the gray matter of the central nervous system while the life of all the rest continues without impairment. When the failure is early it is due only to a defect which seems to be inherent.

Sir Herbert Parson[6] disregarded the abiotrophic theories believing this condition to be the result of some inherent biochemical property of the protoplasm of the cell.

G. Marrinesco thought that gastro-intestinal toxemia resulting from disturbances of metabolism of calcium salts initiated by dysfunction of the parathyroid producing pathological changes in the intercellular ferments, might be responsible for the disease.

Kingdom,[3] Russel, and Hirsch have stated "The disease is a familial anomaly and we do not know the essential cause, even in the cases of the infantile form with definite clinical picture. There is an underlying cause, something more fundamental, that has not yet been described."

Many theories have been advanced, some are lacking in proof while others are still in doubt.

Clinical Features: Amaurotic familial idiocy may be classified as follows:—

1. Infantile form of amaurotic familial idiocy
2. Juvenile form of amaurotic familial idiocy
3. Late infantile form (studied by Bielchowsky[7])

This classification is based on the combined pathological and clinical aspects of the disease. The cases on which this study is based, namely the infantile type of amaurotic familial idiocy, all commenced before the sixth month of life. The number of cases is sufficiently large and the clinical data sufficiently complete to justify the presentation of symptomatology of the disease, as it manifests itself at this period of life. A comparative study of the clinical phenomena in these cases of infants, with the clinical picture in mind of the infantile and juvenile form shows a rather striking uniformity in the features of the symptom complex in infancy.

Such an infant usually is 5 to 6 months old, of Jewish parents. The onset is insidious; the child manifests little or no interest in his environment. He seems to show an increasing weakness of the extremities up to a complete paralysis with a gradual mental deterioration, and is unable to hold his head up or sit erect. All the muscles of the extremities are flaccid, never attempting any voluntary movements. Any object placed in his hands is quickly dropped; the child is abnormally sensitive to noise (hyperacusia).

*A report of two cases following fifteen years' observation of two normal children in between, and a review of the literature.

The child seemingly does not notice objects placed before his eyes, Nystagmus, strabismus have been observed in some cases.

Opthalmoscopic examination reveals the cherry red spot in the nacula lutea, accompanied by absolute blindness, and optic atrophy. Marasmus and fatal termination usually ensue before the age of two years.

Juvenile Form: The disease begins in youth instead of infancy without showing predilection for the Jewish race. These children are born healthy and develop normally to the age of 6 to 14 years, when they begin to show first, loss of intellectual faculties, slow and progressive loss of vision rendering the child blind, demented, and spastic. It occurs in both sexes and all races. However further study is essential to place the diagnosis in the same category as of the infantile and juvenile types.

Late Infantile Form: The late infantile form of the disease begins at 4 or 5 years of age with the same symptoms and findings as in the infantile type, except without the macular changes, and occurs in Jewish children.

Diagnosis: It is difficult to conceive how this condition can be mistaken for any other disease. The clinical picture is so characteristic that little doubt is present in the mind of the examiner, that he is dealing with this disease. The only condition presenting a symptom complex even remotely similar is Niemann Pick's disease which is a familial disease of the infant, with all the cardinal symptoms of Tay Sachs' disease, the cherry spot at the maculae being similar in nature to that of amaurotic familial idiocy. The changes in the dise, however, differ in Niemann Pick's disease; they are yellowish, due to the deposits of lipoid substance in the nerve, while in Tay Sachs' disease they are usually atrophic.

Gaucher's Niemann Pick's and amaurotic familial idiocy all exhibit a disturbance in the lipoid metabolism. When the metabolic disturbances affect the entire body Gaucher or Neimann Pick's disease develops. The former might be the juvenile and the latter the infantile form of splenohepatomegaly or lipoid histiocytosis, while it is believed that the Tay Sachs' form is a disturbance of the same kind restricted to the nervous system.

Pick and Bielchowsky[7] have recently noted an association between Niemann Pick's and amaurotic familial idiocy. Rowland has recently correlated the pathological and clinical findings found in Neimann Pick's disease.

The literature on this subject is to a large extent confusing. Postmortem studies have been too much focussed on nerve tissue, while the chemical constitutional factors have been neglected.

Case 1. I. N. a boy, aged 5 months, was examined in 1916. The family history was negative. First child, of Jewish parents. There was no history of syphilis, alcoholism or tuberculosis in the family. Delivery was normal. The infant was breast fed. There was no trauma, no hemorrhagic diseases of the child after birth, no previous infections. The child weighed 7½ pounds at birth, was well-developed, good color; had a normal gain in weight until the 6th month, when the mother noticed that the child was more listless than other children of the same age, and that the child was drowsy. His eyes rolled curiously; the muscles of the back and neck were weak. He was unable to hold his head erect or sit upright; dropped objects placed in his hands, never attempted any voluntary movements. He was indifferent to his surroundings and did not notice his mother. The slightest noise excited the child.

Physical Examination:—Well nourished and well developed child weighing about 16 pounds. The child's motility was diminished, the tenden reflexes were slightly exaggerated. There was nystagmus, and deviation of the eyes. The pupils reacted sluggishly. The voluntary muscles showed the reaction of degeneration. Ophthalmic examination showed a cherry red spot surrounded by a white patch in the macula lutea.

Laboratory findings:—The Wassermann and tuberculin tests were negative. Urine was normal. The white cells 12,500, with 68% of polymorphonuclears. Red blood cells numbered, 4,750,000. Spinal fluid under increased pressure with negative reaction to globulin tests. The child was growing progressively weaker; emaciation, and blindness ensued, and finally he succumbed at the age of 11 months following bronchopneumonia.

Case 2. E. N. a girl aged 4½ months, examined September 5, 1922; full term, normal delivery, birth weight, 7 pounds 3 ounces. Normal gain in weight up to 6½ months when the child exhibited identical symptoms as the first, when it was noticed that she manifested little or no interest in her environment and was unable to hold her head erect or sit up. The muscles of her extremities were flaccid and there was an abnormal susceptibility to noise (hyperacusia). The vision appeared defective. Ophthalmoscopic examination revealed the characteristic cherry red spot in the region of the macula lutea.

Laboratory Findings: Urine negative. Wassermann and tuberculin tests were negative. Bleeding and clotting time were normal. Blood findings and differential count were normal.

Until November 2, vomiting occurred 2 to 3 times a week. Child lost a pound in weight. December 16, she began to refuse food and lost 12 ounces, developed

stomatitis and pallor of the mucus membrane. January 12, pallor increased, loss of weight continued, also occasional twitching of the legs and hands. She developed convulsions and turned blue, with profuse perspiration. Her eyes were sunken and she became emaciated. In March the child was growing progressively weaker, and developed a paralysis, mental deterioration and absolute blindness. Atrophy had been markedly progressive until death finally ensued about April, 1923.

Post mortem showed extreme emaciation. Subcutaneous fat had disappeared, fat muscles were atrophied, and showed very little rigor mortis. There was no fat in the mesentery or retroperitoneum. The brain tissue was atrophied. The dura was loose and collapsed giving an impression that it was previously distended with fluid. The meninges were edematous and distended. On removing the eye, the macula lutea showed a deep colored spot about 1½ cm. in diameter, surrounded by a gray ring 2 m.m. wide. No other pathological changes of importance were found.

In 1897 Koplik[9] reported two cases in different families. In the first family four normal children were born. The youngest child died of amaurotic familial idiocy. The second family the mother had eight children. Four died of this disease. The remaining four were all well.

In 1911, Dr. Abt[9] published his report of two cases in the same family. He believes that the disease has a familial tendency. As a rule several children in the same family are affected.

Van Starch,[10] in 1920, reported the case of a thirteen months old child, born of non-Jews, in a consanguineous marriage. There were five children born, three girls, two boys. All three of the girls developed amaurotic familial idiocy with fatal termination. The patient reported was the third child.

Frets and Overbosch[11] reported three cases in the same family, representing the second generation. Besides the amaurotic familial idiocy represented in the direct line of descent, other nervous disturbances were noted that manifested the hereditary tendencies involved. Symptoms of this disease developed in the three children, and proved fatal in all.

That there is a familial tendency Epstein[12] showed in a family of eight children, four of whom died of this disease.

In 12 cases reported by Gradel and Folk,[17] the familial trait was demonstrated in only three. In two families there was one other child affected, and in the third family two other children suffered from the same disease.

Cordes and Horner[13] reported two cases in Japanese families, the parents in each instance being first cousins. In case 1, the first child died at three years of age. This child was well until one year old, when amaurotic familial symptoms appeared. Pneumonia was a terminal complication.

In the second family there were three children. The first one was normal until six months and died suddenly. The second child had a similar fate. The third child died at the age of two years of convulsions.

No information was obtained as to the definite presence of amaurotic familial idiocy in the previous children, nor is there a record given of subsequent births.

In 1929 Stewart[15] reported twelve children in one family with amaurotic familial idiocy. Six of these children died in infancy of this disease. Of the remaining children the 1. oldest daughter is unmarried; 2. second daughter married, had one child, who died of this disease; 3. third daughter married, had one child, aged 2½ years, well; 4. one son married, had three children, two died supposedly of meningitis; 5. second son married, disinclined to have children on account of history of familial tendency.

The disease is regarded by Stewart as hereditary and Sjogren,[18] in a comprehensive study of the condition, found hereditary tendency and repeated occurrence of the same disease in families.

Davies[16] case is of a Gentile family, normal parents, with no history of physical or mental ailment. The first child is a boy, eight and one half years of age. He is backward at school, marked obesity, his condition gives the impression of pituitary infantilism. The second child is a boy of 5, normal. The third child, a daughter, was normal until five months, when symptoms of this disease became manifest. She died at two years. The fourth child, a boy, was normal until six months, when he lost power to hold up his head, became stupid and indifferent.

CONCLUSION

1. Two cases of amaurotic family idiocy reported.

2. The first child, a boy, amaurotic family idiocy.

3. The second child, normal boy, now 16 years of age.

4. The third child, a girl, amaurotic family idiocy.

5. The fourth child, normal girl, now 9 years of age.

In view of the repeated occurrence of amaurotic familial idiocy in the same family it would be wise for the medical man to advise afflicted parents that subsequent children might be similarly affected and that every effort should be made to prevent conception.

1737 Howard St.

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USE OF FRESH HUMAN SERUM (COMPLEMENT) IN MENINGOCOCCUS MENINGITIS

In a case of meningococcus meningitis observed by Joseph J. Bunim and Frederick A. Wies, New Haven, Conn. *(Journal A. M. A.,* Jan. 21, 1933), antiserum therapy was followed by clinical improvement but did not sterilize the spinal fluid. After twenty-eight successive positive cultures, fresh normal human serum was administered intraspinally, followed by additional antiserum, with immediate sterilization of the cerebrospinal fluid.

MILK FROM RABID COWS — DANGER OF INFECTION

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Rabies is a perpetual problem in Illinois. The disease is always prevalent in the State and at times rises to epidemic proportions of large magnitude. Positive evidence of infection was found by laboratory examination in each of more than 1,000 animal heads (mostly of dogs) in 1928. Every year the laboratories of the State Department of Public Health examine for rabies more than 400 heads and positive evidence of rabies is found in from one-fourth to one-third of those tested.

When a definitely rabid dog bites a person there is no question about the type and method of treatment required. The possibility of indirect infection of humans, however, introduces a multitude of questions. One of these questions arises when people drink raw milk from a rabid cow. This situation developed recently in Southern Indiana near the Illinois border at Carmi when 19 people were found to have been drinking milk drawn from a cow that died of rabies. A state of alarm prevailed in the community when it was learned that several dogs had died from rabies and those who had drunk milk from the rabid cow experienced no little unrest. About a year ago the Illinois State Department of Public Health was called upon to furnish material for giving the Pasteur treatment to a group of people who had drunk unpasteurized milk from a rabid cow. A similar situation is liable to arise almost anywhere in the State at any time. Rabid dogs constantly attack cattle in Illinois.

Should a person who has drunk raw milk from a rabid cow be given the Pasteur antirabic treatment? In an effort to settle this question wisely the State Department of Public Health not only searched the literature on the subject but communicated with a number of physicians, veterinarians and medical research workers whose opinions on the subject are worthy of respect and consideration. On the basis of the literature found and the opinions expressed, the answer to the question is definitely, no. Theoretically it seems possible that a person who drinks raw milk from a

rabid cow may be infected with the disease in that way. Practically the danger is so remote that anti-rabic treatment incurs an unnecessary expense and inconvenience.

No human, so far as is known, ever contracted rabies by drinking milk from a rabid cow. That fact is very important evidence that the risk of infection through drinking milk from a rabid cow is nil. It seems reasonable to believe that many people at one time or another have unwittingly drunk milk from rabid cows. It is known that there is considerable loss of cattle in Illinois annually from rabies spread by rabid dogs.

Experimentally it has been observed that young animals feeding at the breast of rabid mothers escape infection.

The letter from the State Department of Public Health to a number of authorities on the subject read as follows:

"Can an individual contract rabies by drinking milk from a cow suffering from that disease?"

"Would you advise giving the anti-rabic treatment to such an individual if the animal has died with rabies?"

A reply was received from each. Pertinent excerpts from the replies are quoted below, the name of the author appearing first.

Milton J. Rosenau, M.D., Professor of Preventive Medicine, Harvard Medical School: "So far as I know, an individual cannot contract rabies by drinking milk coming from a cow suffering with that disease. I should not advise giving the anti-rabic treatment to such an individual even if the animal has died of rabies. The matter is mentioned in the section on Rabies in my book 'Preventive Medicine and Hygiene'."

William H. Park, M.D., Director of Laboratories, New York City Health Department: "I do not believe that it is possible for a person to contract rabies by drinking milk coming from a cow suffering from that disease. Therefore, I would not advise giving anti-rabic treatment."

Ludvig Hektoen, M.D., Professor of Pathology, Rush Medical College, University of Chicago: "In answer to your letter of the ninth, let me say that so far as known a person drinking milk from a cow suffering from rabies will not thereby contract that disease. The only reason for giving anti-rabic treatment to such a person would be to set at rest in the minds of the person himself and his friends all possible doubts that everything in the way of 'safety first' is not being done."

Robert Graham, Professor of Animal Pathology, University of Illinois, Urbana: "With reference to your inquiry regarding danger of milk from rabid cows will say that it is the prevailing opinion of pathologists that this is not a dangerous source of infection. The writers have observed rabid rabbits nurse their young without communicating the disease. On different occasions, we have been confronted with this problem and so far as we know no case of rabies in man in the United States has been traceable to milk. While the possibility is potential the practical danger is apparently not great."

National Institute of Health of the U. S. Public Health Service (Telegram): "No case rabies known from drinking milk. Treatment not advised."

H. D. Chamberlain, Veterinarian, Illinois State Department of Agriculture: "In compliance with your request of this morning as to the danger of drinking milk from cows which had been bitten by known rabid dog or a cow which was known to be rabid, I am of the opinion that there are very few if any cases on record where all other sources of infection have been eliminated in which a human has contracted rabies in this way.

"Perronceto & Carita—Nocard—think there exists a possibility of transmitting the disease by means of milk from diseased animals, but Nocard, in the course of two months, had a fox eat the cerebral and spinal tissue of six rabid foxes and twelve rabid dogs with no harmful results.

"Several experiments have been conducted by Delaford-Renault-Hertwig and Nocard by feeding saliva, meat and spinal cord of rabid dogs to horses, dogs and sheep without any ill results.

"I am of the opinion you are not justified in advising the use of rabies antitoxin in cases where the only exposure was through the use of milk from cows either bitten by known rabid dog or from a known rabid cow."

Mazyck P. Ravenel, M.D., Editor, American Journal of Public Health: "Theoretically, there is no doubt in my mind that an individual can contract rabies by drinking milk from a rabid animal. I have never heard of a case, nor has Dr. Ziegler, who succeeded me, ever heard of such a case. Both of us, however, believe in playing safe, and would recommend anti-rabid treatment, preferably one of the shorter series, like that of Harris, of St. Louis."

C. F. Adams, M.D., Director of Laboratory, Indiana State Board of Health: "I never have heard of a case of human rabies contracted from milk of a rabid animal. I do know, however, that several years ago the Minnesota workers succeeded in producing rabies experimentally from such milk.

"We always recommend the Pasteur treatment for people who have drunk milk from a cow during the few days preceding the animal's death. We do this under the theory that there might be a break in the mucous membrane somewhere between the lips and the stomach."

A London memory expert has sold his brain to a medical college for $10,000, to be paid in instalments. We can only hope for his sake that he is not the kind of chap who loses his head when he gets a little money.

—*Boston Herald.*

MEDICINE—WHAT OF THE FUTURE?

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INTRODUCTION

Dr. E. H. Cary of Dallas, Texas, in his President's address gave to the medical profession a most inspiring message of kindliness, vision, and pride.

His "high bridge," gives us a most beautiful perspective and strengthens our ideals.

He stated: "If we are to preserve individualism and the fine relation that has ever existed between physician and patient, we must with renewed zeal and exceptional energy seek an answer to the problems which are related to the economic side of the practice of medicine," also, "I hold that it is within our province to solve all the problems concerned in the practice of medicine. The people await our decision."

It is the privilege of few, to say so much in so few words and to say that much so beautifully.

In a discussion of "Medicine, what of the future," there is of necessity, two principal divisions of futurity, scientific and economic.

If the economic condition is met fearlessly and honestly, the future of scientific medicine is assured and I shall leave the discussion of this phase to others.

Economically, group practice, clinics, specialties, etc., are in the continuous process of readjustments.

As these readjustments are empirical readjustments, we must wait for time to prove the relative values.

But there are huge storm clouds assembling, nay, more than that, the storm is breaking upon us, the storm of laity control of the practice of medicine.

This storm is not waiting. We must act decisively—"State Medicine" or "socialized medicine" advocated are clamoring more loudly than ever.

Financial depression, with its unemployment, is sending out millions looking for something that can be bought with an empty purse.

In accordance with the idea of state medicine the Bulletin of A.M.A., October, 1932, describes several associations that, while in no way representing state medicine, nevertheless, are blazing the way for less and less individualism and more and more the paternalistic state.

Some of these associations are known as:

1. *Mutual Benovelent Hospital Association.* Established in 1851 in California, philanthropic in character and liberally endowed. The hospital staff is of highest grade, reputable physicians maintained for the membership only. Nominal cost $22.61 annually but offers free choice of physicians *only* in so far as the free choice happens to be one of the hospital staff. *The majority of the profession excluded.*

2. *Workmen's Compensation in Oregon.* The state fund carries about 90% of the compensation insurance. Most of these compensation laws with direct contract provisions provide that an employer may levy an assessment on his employees for medical service, averaging about 20c per day in Oregon.

(A) In Journal A.M.A., November 26, 1932, under the caption Medical Economics, Fred Ross, a labor attorney, is quoted as follows—"When the present commission assumed control, one of its first acts was to dicharge the entire medical staff, which was composed of physicians particularly fitted by training and experience to serve the needs of the Industrial Accident Commission. They had served under all of the previous administrations, but, nevertheless, they were made to walk the plank to make room for those who were close politically and otherwise to the governor in fact."

Similar organizations in Alabama, Texas, West Virginia, California and New York.

3. *Hospital Associations.* "Hospital associations, in general, are medical contract associations, having few staff physicians on salary or work allotted to the physicians on piece work basis.

"This involves solicitation for medical work, underbidding and inadequate fees to physicians, frequent disregard to professional ethics, no free choice of physicians."

4. *County Contracts for Care of Indigent Sick.* This again delves into the element of politics, generally with lack of regard for competency of physician.

5. "In September, 1929, Dr. Walter B. Coffey of San Francisco outlined to the California Medical Association a plan for medical service to wage earners with incomes less than $2,500 per annum, those earning less than $1,200 a year paying at a rate of $1.00 per

month. Those earning $1,800.00 a year paying $2.50 a month. This plan necessitates all members of State Association becoming associate members in the State Society Plan."

6. *Los Angeles Record Health Service.* Open to subscribers of the Los Angeles Record. Service of two types.

First type requires an annual subscription to the paper and a registration fee of $1.00. "These fees are approximately one-half of the fees regularly paid by the suffering public."

Service No. 2. "A complete medical service at low cost of $1.35 paid monthly in advance to the Pacific Life Extension and Hospital Service System. This plan is commented upon in the Journal A.M.A., November 19, 1932 as follows:

CRITICISMS (A.M.A.)

"It is difficult to discover any merits in this scheme. Possibly the stereotyped claim made for all such schemes may be advanced; viz., that it offers a kind of medical service to some who might otherwise depend on charity.

"Its demerits are as many and as glaring as the flamboyant advertising of '200 designated leading physicians and surgeons,' which dwindles to 23 when the list appears. Just what medical authority picked these 'leaders,' the advertising fails to state.

"Adequate medical service cannot be delivered for $1.35 a month. If physicians crediting their loss to advertising received through publicity at first do give such a service, professional income, incentive and morale will decline until future progress and resulting service are threatened. Such proposals illustrate the inevitable deterioration that follows commercial competition between contract schemes.

"If such scheme for the distribution of medical services, is based on the same premise as many others in which an insurance principle and the interposition of marketing agencies are used, it is difficult to determine how either the medical profession or hospitals will be able to realize an adequate fee for the service rendered. In this particular instance the newspaper, the Pacific Life Extension and Hospital Service System, Inc., hospitals and physicians are to be provided an income at from 45 cents to $1.35 per month (plus $1.00 for registration fee) for an entire family.

"It should be obvious that the rates quoted are utterly inadequate to provide any medical service except the barest first aid for minor afflictions. To provide complete medical services at such rates would mean swift bankruptcy for any honest and conscientious individual or group. It is not known what is meant by the statement 'the reduced rate arranged for me by the Los Angeles Record.'

"Although the advertisements of this service lead the reader to believe that medical service is to be provided for all illnesses, nowhere is there a definite statement to that effect—the completeness of the medical service available and the charge for that service except the monthly stated payments, are merely implied.

"It seems reasonable to infer that in addition to the monthly rate the patient may be required to bear personally the 'reduced rates arranged . . . . . by the Los Angeles Record.' "

7. *Baylor University Hospital Insurance Plan.* A monthly fee of 75c, covering hospital, operating room, anesthetic, laboratory fee, floor nurse, ordinary medicine and dressings over a period of 21 days per year with a 50% discount on x-ray work, but does not include the physician's fees.

8. *Texas Medical Association Contract Organization (Proposed).* In this plan a body composed of the most honored and respected physicians in the state should apply for a charter as an association to primarily guarantee adequate medical service to corporations.

This plan is ambitious, in that the association is to be allowed to possess property, publish a monthly medical magazine, rent, build and to conduct a scientific industrial laboratory and to rent or build a hospital ward for scientific treatment.

It is intended that this association is to offer its service to insurance carriers and take over the entire medical problem.

9. *Bassett Hospital Annual Payment Plan.* This has a membership fee of $25.00 per year per individual and $100.00 per year for entire family. This plan sponsored by a group of physicians comprising the staff of Bassett Hospital. All these physicians are on a salary basis and their offices in the hospital, there being twelve other physicians in the community.

10. *Columbia Casualty Company Sickness Insurance.* By the Columbia Casualty Company, a representative of the Ocean Accident and Guarantee London Corporation, the premiums run from $3.00 to $10.00 per month.

The highest class of service is allowed and hospital care for 26 weeks with a private room at a rate not exceeding $15.00 per day, including nursing service, drugs and medicine. The Columbia specifically provides that the Company shall have no control over the character of the medical practice; however, it is planned that 45% of the premiums be set aside for the medical service, 12.5% for hospital service and 42.5% for promotion, organization, sales, administration and profits.

For further details for this plan, I refer you to the *Bulletin.*

11. *Medical Economics—Journal A.M.A.—New Forms of Medical Practice No. 4. The Bridge Clinic, Tacoma, Washington.* This is a description that aptly describes a great many of the organizations attempting to function at the expense of the individuals, as a class and the medical profession as a whole.

One paragraph is significant: "This latest and most significant development has been accomplished largely by the use of supplemental 'medical contracts' covering non-compensable diseases and injuries, into which the employees are compelled to enter as a condition of employment."

The Bridge clinic has offices in Seattle, Tacoma, Eatonville and 25 other points in Washington.

Harry E. Mock, "Industrial Medicine And Surgery," 1921, in his "Solution of the Problem" advocates "insurance against sickness, accidents, invalidity, unemployment and old age"—and says, "No longer shall inadequate medical and surgical care be tolerated or protected by the unwritten laws of the profession generally included under the term medical ethics."

Warbasse, in his "Surgical Treatment," volume 3, writes: "As one looks into the future, communities are seen divided into sanitary districts, each with a sanitary expert answerable for the public Health . . . . . Here should be laboratories for diagnosis equipped with every appliance and facility of science . . . . . in connection should be a central hospital."

In previous editions he spoke in a stronger language. "Abroad the socialism of medicine or state medicine is lauded by the privileged few and damned by the whole, less a few of its parts, and generally takes the form of insurance."

Chicago Tribune, November 30, 1932, carries the story, "Group medical care urged by survey report."

Sweeping changes in the field of American medicine which if put into effect, would result in the partial socialization of the medical treatment, were advocated today in the report of the committee on the cost of medical care.

The revolutionary document, which advocates extension of the hospital center idea, with the use of insurance and taxation to place costs on a group basis, has already stirred the beginning of a controversy which bids fair to rock the medical world.

From Chicago came word that the Journal, A.M.A., in its next issue of December 3rd, would impugn bias to the report and urge support of the minority findings which were signed by members of the A.M.A. on the committee who recommend the following:

1. Government competition in the practice of medicine be discontinued.

2. Coordination of medical services a function for local communities.

3. The general practitioner be restored to central place in medical practice.

4. That the corporate practice of medicine be opposed as unfair exploitation of the medical profession.

In a special article by Sir Arthur Newsholme, M.D., F.R.C.P., K.C.C., Birmingham, England, as reported in the Journal, A.M.A. of May 14, 1932, there is a rather extensive outline of the relationship of the private medical practitioner to preventive medicine. He prefaces his outline with several postulates, or, to be more exact, nine postulates. I shall spend no time in repeating these postulates; if you are interested you will find them in the volume mentioned.

The outstanding affect of this article, or I might say the reaction to the reading of this article, to my mind, is the marvelous complacency with which the proponents of socialistic medicine classify, direct, treat, etc., humanity.

I am impressed with the idea that perhaps sometime some thing or things may force the profession and the laity and would be leaders of the medical profession to consider humanity not as mass production but as individual man.

Perhaps the political term that was coined during the last election "The Forgotten Man" is very apropos in the treatment of the sea of human misery.

In this article, under the head of "Medical Aid for the Poor," he writes that every doctor may undertake this work according to a fixed schedule of fees.

Again, "In Ireland, in many, especially rural districts, half the population receive gratuitous medical service; and it may be said that Ireland approaches nearest of all countries

known to me to State medical service, the cost of which falls on general taxation." This, of course, includes periodic medical examinations.

When will the medical profession realize that while we stand ready to preserve, protect health we stand only in *readiness?* We are *not* actual guardians of public health; we function only *when called upon.* We have been given no supernatural powers by the heavenly Father or the civil state to automatically direct the activities of the citizens.

When will the American medical men and the American public as a whole, or I may go farther than that, the populae of the world realize that we can never legislate health in its entirety any more than we can legislate thrift.

Do we soon forget the parallel efforts along this line of the "noble experiment"—the 18th Amendment?

In the succeeding paragraph he writes, "In Scotland there is a special State Service for its highlands and islands, in which, otherwise, medical aid would be lacking. *The government guarantees the salaries of doctors in supplementation of fees paid by patients, and gives mileage allowance for travel.*"

"Is not such an action indicated in certain mountainous parts of the southern states in America, especially for midwifery and for that terrible disease trachoma?

"Not even the most rigid opponent of state intervention can doubt its necessity in areas where otherwise our three first postulates cannot be met."

It appears that Plato lives forever, especially in the mind of him who is snugly ensconced in the public treasury.

He continues: "This is a case of utmost need; but, short of this, nearly every private medical practitioner, especially in rural districts, day by day is himself a vicarious substitute for the state, and he gives medical aid gratuitously—as every member of the medical fraternity must—when need arises."

I take exception to this entire statement. I do not recognize the medical profession as a submissive hand-maiden of the state. I insist that, practically, State medicine is *State Politics,* and as such, is contaminated by and saturated with all the inefficiencies and injustices that go hand in hand with American politics.

I insist that the Association of Medicine is made up of individuals who are helpers of the Divine Physician and should in no way be lowered to the threshold of politics.

It may be as some claim that we have in our ranks those that are inefficient.

This I do not deny or affirm, but I point to the religious profession who have come throughout the ages, practically, from the same source as that of medicine; and remind you that religion in America is entirely separated from the state; that the religious foundations are built on theoretical grounds and beliefs and that medicine of the same degree of antiquity has replaced, wherever possible, scientific facts instead of theories, and stands on even firmer ground; that the soul is, even in 1932, debatable, but malaria is perceivable; that the many forms of prayer are believable, but the mosquito is viewable.

When the most noble essayist states, "Thus the private doctor, the tax gatherer, and the medical officials alike, are state servants," I would ask that he place himself among the thousands of the followers of the Master and forget his emoluments, revenues and gains by state benefactions and again occupy the place of the true physician.

In his discussion of the hospital provision for the poor he phrases, "For a weekly payment of perhaps three pence, employers contributing an equal amount, families are partially insured for consultative services and when necessary for treatment in hospital; in some towns, half the cost of maintenance of voluntary hospitals is now derived from these sources."

He goes on to say: "Evidently such a system lends itself to increasing abstractions from private medical practice and although the majority of these patients would be sent to a hospital by the medical practitioner treating them, there are others who should remain under his care. *This needs to be more strictly regulated.*"

I ask: By whom! The master gangster whose cohorts elect him to the presiding office? How much humanitarianism will be shown? How much liaison with the Divine Physician will he be accorded?

Perhaps some day the forgotten men will arise in their majesty and say to the state: "Keep your hands off my pastor and my doctor—or I will change the state."

In his discussion "Treatment to Anticipate Disease" I quote (p. 1743): "In every European country, public authorities and voluntary agencies are busy with this most important work; while private practitioners who might be in charge of it, singly and cooperatively, have little concern with it, under present medical practice, etc."

How does this accord with the American custom of electing the bricklayer to be judge, the musician to congress, the lawyer to the Highway Department and the man who can control the votes to any position he wants?

It takes years of patient study to be a doctor, it takes a political contribution to become the head of a maternity bureau, or a Health Department Superintendent. *More* reasons for State medicine.

The essayist treats at some length "Insurance treatment" and naturally confines his observation to the European Countries. Let us look for a moment, at the American situation.

The insurance problem in America contacts the medical profession in two distinct ways:

1. Workmen's Compensation.

The fundamental method at present is for the employer to pay to the Insurance Company a stipulated sum and in return the Insurance Company agrees to take care of any losses that may come to the employer under the Workmen's Compensation Act.

The main idea is of course that the Insurance Companies hope to collect more premiums than they pay out in compensation losses.

So many factors enter into these transactions, that it is impossible to detail them, unless years of time are given to the problem.

The most flagrant disrupter is politics. The political scheme of the compensation act in Illinois is basically: The Legislature enacts legislation describing who shall come under the act; what weekly payments shall be made, what payments shall be made for the Workman's specific losses (loss of thumb, foot, eye, leg, etc.); and sets up machinery for the enforcing of the act, consisting of the bureau itself, commissioners, arbitrators, and appellate divisions of circuit and appellate and supreme state courts.

The commissioners, arbitrators, clerks, etc., are political appointees.

The Insurance Companies keep their rates down to compete with each other, employ investigators, adjustors and doctors.

The investigators and adjustors to keep the losses to a minimum—the doctors to treat the injured, keep specific loss to a minimum and curtail the time lost from work, etc.

Unfortunately there is severe competition between the physicians themselves so that the Insurance Companies pay a very variable scale of fees for professional services and pay from zero to one hundred dollars a day or more for medico legal services.

Owing to the competitive struggle for business the insurance premiums are unsatisfactory in returns—most of the companies balance their books in the red and the insurance carrier strives in several ways to break even, viz.:

1. Refuse to accept compensation insurance unless the employer gives them enough insurance in other lines, bonds, plate glass, automobile, public liability, etc., so that the profits from insurance other than compensation, overcomes the losses of the compensation insurance.

2. Elimination of bad compensation risks, underground working, restaurants, quarry working, etc.

3. Insurance associations; mutual agreements on rates, etc.

4. Securing medical services at lowest possible cost.

The insurance carriers are thus engaged in no humanitarian enterprise. The enterprise is purely commercial.

The various forms of insurance issued to the individual have been enumerated in part, and again are purely business ventures with a hope of profit, a hope of paying out to the policyholder, the hospital, the doctor, less than the premium.

The insurance carrier states positively that as soon as the insurance companies withdraw from the field of compensation, state medicine will be in full force.

Newsholme continues: "Even with the handicap constituted by combining insurance for medical and for monetary benefits, the cause of preventive medicine can be satisfactorily served *IF WE secure almost superhuman competence in the management of the insurance scheme, and that scheme furthermore is adhered to by every injured person and every doctor with almost superhuman loyalty and integrity.*"

A large "if," lots of Plato, plenty of Utopia. Again Sir Newsholme: "The only practical alternative consists in vast extensions of state service without insurance."

With no desire to offend anyone, I take severe issue with this entire scheme.

Gentlemen of the profession: Why should the medical profession be the victims of this philanthropic bunk? As a general lot the medical professional are an altruistic group, and we would like to see any one, the insurance carrier included, make money—but why at our expense?

State medicine with its corruption, bureaus, commissions, its thousands of ramifications into the taxpayer's purse, its inefficiencies, is urged and planned.

Are all the Al Capones in Atlanta? What of the medical racketeers who devise multitudinous State medical schemes with salaries attached at the expense of the doctor?

Are you not satisfied the Veterans' Bureau federalized medicine?

How many thousands of service men (incidentally their wives, children, parents, grandparents, and sixteenth cousins) have been augustly summoned to the various hospitals; been under observation for months, years; had x-rays, Wassermanns and Kahn, blood chemistry, uroscopy, fluoroscopy, psychoanalysis, retinoscopy, turbinectomy, prostectomies, and then went back to your community with a pension.

You, in your benign ignorance as a general practitioner, have looked them over, gone into your drug room, prepared an ounce of that non-federalized castor oil, administered it to the patient and have seen him, the next week, hauling coal.

Adam got something for nothing and then had it taken away from him. What difference is there in the Adam of 1932?

Must we go on to see the quivering flesh on the operating table adapting itself to size No. 2 crane valve No. 1,736,978,426—skillfully manipulated by the state medicine legalized steam fitter, wearing on his operating gown union local card No. 23,764?

I suppose we will also see a certification by Secretary of State that the operator is empowered by law to open this valve not oftener than once in ten days.

What can we do to remedy this situation?

How can we establish a Monroe Doctrine for medicine?

How can we protect our patients from these cunning schemes with ulterior motives and protect ourselves against exploitation?

What can we do to prevent monopolized medicine and socialized medicine, or to modify state medicine so as to secure the greatest benefit to the population, justice to the medical profession, and eliminate, to as great an extent as possible, politics?

I offer the following suggestions for your consideration:

1. Let every one in our profession remember that we are treating humanity, that we are living in the midst of humanity; that we ourselves are merely human. Let us take time to get in touch with humanity and human affairs.

As much as we would desire to withdraw into our studies, our laboratories—let us be rigorous with our self discipline and sternly remember to properly enmesh our gears to humanity with its desires, aspirations, foibles and follies.

Let us discard forever the topper and swallow tail—but at the same instant remember that we are worthy of our hire—we own our place in the sun.

(We are voluntary servants to the many, but in bondage to none—the state included.)

2. Let us reason the proper procedure among ourselves—in local medical societies, in meetings like this, in state meetings, national meetings.

And while we are reasoning out these matters, let us be sure that it is the *Collective We* that is doing the reasoning and not the few.

Remember your value as a reasoning agent is not to be judged by your Ford, your Rolls Royce, your country practice, your staff position.

Jenner was a country doctor.

As a rule the more you know your patient's joys and sorrows, the more valuable your opinion is on matters pertaining to the medical profession.

3. Let us know who represents us in politics.

It is hard to get men of proper caliber to pay attention to politics but *it is easy to get the politician to pay attention to votes.*

If your patients *trust* you, they will so vote that the medical profession will be unhampered

in its progress, and this is the *Keynote* of preventive State medicine. Be right, trust in God, and shoot straight.

4. Let us face the facts regarding the general practitioner. (He is the very foundation of all medical progress and of humanity's welfare).

Those engaged in research can find the progression. Those engaged in teaching medicine can propound the progression, but the general practitioner applies the progression after it has been properly evaluated and held in solution of horse sense.

5. Too long has the general practitioner held the specialist in awe. The specialist is only a doctor like ourselves. He is but one of the many working tools of the general practitioner, even as the chisel and the saw and the miter are the tools of the carpenter.

Even as the carpenter reaches for the chisel in its place on the wall and uses that chisel to do that which the carpenter desires it to do and then replaces the chisel in its proper place, so should the general practitioner use the specialist for the desired results and then see that he is properly in place afterwards.

I mean by this that the general practitioner should constantly keep himself with such a mental equipment that he *knows* when the roentgenologist is necessary or the cardiologist is necessary or the laboratorian is necessary; and when he gets his reports, he must be equipped mentally so that he can interpret their reports.

This means constant study and an exacting life. This means that hours of desultory conversation and wasted time must be curtailed and that time spent in keeping abreast with medicine in general.

This means that the idea of sending a patient into the hospital and ordering, in mass, all of the laboratory procedure possible must cease.

This means that only the laboratory procedures that are necessary are undertaken.

The criticism that hospitals and medical services are so expensive is partially correct. It is up to the practitioner to eliminate all unnecessary procedure, and, again, this means that he must keep up to date.

The specialists that I have been privileged to know are of the highest type. I admire them; enjoy their work; enjoy their company, but I intend that the specialist be called in consultation only when I deem it necessary—when more detailed information along some line is necessary.

This naturally leads to the great bug-a-boo, splitting of fees.

At the very beginning, I want to take to task the members of the medical profession that have carried the profession's dirty linen into the public press for cleansing. I assert, without fear, that the doctor who has carried the subject of fee-splitting into the public press is deserving of the censure of every member of the medical profession.

This is a medical affair and should be handled within the confines of medicine.

I don't know how you medical men react to these men writing these articles in the public press, but to me, it is merely from the selfish, personal standpoint of advertising.

The whole question of splitting of fees can be handled and should be handled by the general practitioner. We need no society or college to promulgate rules for us. Common decency, common honesty to our patients, common respect for ourselves—in a word, ordinary horse sense, points to a solution of this problm.

There is no reason why the general practitioner, having in his clientele of patients, someone in need of an appendectomy, should not handle the entire problem.

If he qualifies as an up-to-date practitioner, his knowledge of the specialist needed to help this patient is sufficient.

There is no reason why he cannot say to the proper specialist—"My patient needs an appendectomy; my patient is in such and such circumstances—how much will you charge me, not the patient, to perform this operation?"

(We will say, for example, that the surgeon quotes a charge of $100.00)—

The general practitioner tells his patient who needs this operation—"It will cost you $100.00 besides my services for your operation. My services will be $125.00.

"Besides this will be your hospital bill which I estimate (the general practitioner should be able to estimate) as $75.00. Therefore, your expense will be about $300.00 all of which you will pay to me."

Then the general practitioner pays the hos-

pital in full, or in what pro rata the patient pays him, and likewise pays the surgeon.

The objection will be given that the general practitioner will secure the cheapest specialist possible. This is unworthy of an answer.

There is no reason, no justice, in turning a patient over to a specialist, losing entire contact with the patient during the time of his treatment under the specialist.

Today, too often, the specialist assumes the role of a hero in the patient's eyes, when in fact the real credit should be given the general practitioner.

He it is that diagnoses the condition; he it is that assumes the responsibility for the workmanship of the specialist; he it is who assumes the blame if the specialist fails.

Being forced to assume all responsibility, he should be in entire charge.

The specialist is, rightfully, the general practitioner's assistant.

Did a saw ever build a cabinet?

6. There is one other thing that the general practitioner and the assistant, the specialist, must do and do at once, and that is eliminate the jealousies.

Join your Association of Commerce and learn as the merchants have learned, that petty bickering among themselves spoils their advancement.

Remember that every doctor, whether he occupies a chair in a medical college, or whether he be at the head of a famous clinic, or whether he be a practitioner in a sparsely settled country, assays the same.

His knowledge and his experience properly evaluated is of equal weight.

Every doctor near you is human like yourself; is not the rascal that some of us would like to tell our patients about; is not the God that his friends declare—just plain man, trying to do his best.

No physician, other than the treating physician, is the judge of what should be done in a given case. There is only one real Physician and He has no office on earth. The rest of us are doing the best we can, so let's co-operate and cease denunciation.

If you must quarrel, keep your quarreling in the profession. Again I say that this is a medical family affair and no excuse to wash medical linens in public gaze.

7. When your delegate goes to the state meeting, be sure that he goes to the state meeting; be sure that he goes instructed as to what the actual majority of your society wishes.

Likewise—the delegates to the A.M.A.

We have wonderful men as officers—but they are selected and elected by delegates representing you.

For true progress there should be no human gods in medicine.

8. And finally—

Let's change our medical symbol.

Apparently, the proponents of State Medicine are myotic. They perceive the symbol of Aesculapius as the representative of the patient, ignorant and dumb ox.

Medical services are not on the auction block. We own our place in the sun.

700 Peoria Life Bldg.

"MORNING STAR" FECALITHS OF THE APPENDIX*

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Star shaped fecal concretions referred to by Tobler[1] as the "Morgenstern" fecaliths are rarely found in the vermiform appendix. Unlike the common round or ovoid fecaliths which are found according to Neumann[2] in about 29.7 per cent of all the appendices excised at operation, only scattered reports are encountered concerning these star shaped fecaliths. The first mention of them was by Rochaz[3] in 1899 who attributed their configuration to irregularities in the mucosa of the appendix. Later Faulkenstien[4] and Tobler in 1923 reported cases with similarly shaped concretions. We have found no other mention of these concretions.

The apparent rarity of this condition seems to warrant the report of a single case in which several star shaped fecaliths were found in the vermiform appendix.

REPORT OF CASE

J. C., a boy, aged 13 years, was referred to us by Dr. Charles Pugh, Sept. 15, 1930. For the past year the child complained of a dull intermittent lower abdominal pain which at times localized to the right lower quadrant. The pain was often associated with a diarrhea

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but with no vomiting. About 24 hours prior to his admission to the hospital the patient complained of a diffuse abdominal cramping pain which within 14 hours localized in the right lower quadrant. The child was nauseated but did not vomit. Following the onset the patient had two loose stools.

The past general history revealed that the patient had acute rheumatic fever when seven years of age and later developed a mitral stenosis. The remaining history contained nothing of importance.

Physical examination revealed a poorly nourished boy, 13 years of age, who appeared acutely ill. The temperature was 99.6° F., pulse rate 90, and respiratory rate 18. Abdominal examination revealed a tenderness and rigidity over the right lower quadrant but no mass was palpable. Elsewhere the abdomen was soft and not tender. The general physical examination revealed no pathological findings except those of a compensated mitral stenosis.

The white blood count was 23,500. The urine contained no albumin, no casts, no blood cells.

A diagnosis of acute appendicitis was made and immediate surgical intervention was advised. Under ether anesthesia the abdomen was opened through a McBurney incision. The appendix and cecum were easily delivered. The appendix was enormously enlarged, firm and its serosa was hyperemic. The base of the cecum especially around the origin of the appendix was thickened. The ileocecal lymph glands were enlarged up to 1.5 cm. in diameter; they were gray white, and firm. The presence of a thickened appendix and cecum associated with enlarged regional lymph glands and a history of abdominal symptoms over a prolonged period, suggested an operative diagnosis of a hyperplastic chronic appendicitis, probably tuberculous. With the possibility of an ileocecal tuberculosis in mind the last 10 cm. of the ileum, cecum, ascending colon and one-half of the transverse colon were resected and the continuity of the intestines was reestablished by an ileotransversostomy performed with a lateral anastomosis. The post operative course was uneventful. The patient was last seen 14 months following the operation. He was relieved of his chronic abdominal distress, gained weight and had grown about six inches.

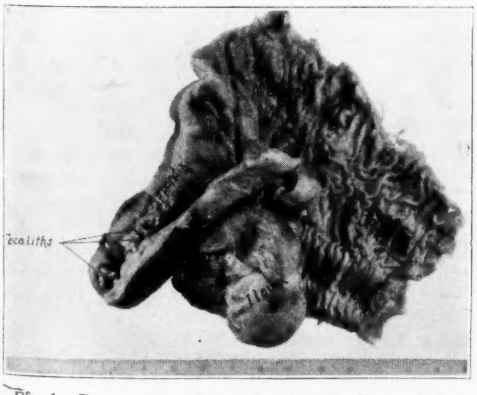

Fig. 1. Resected specimen showing the hyperplasia of the appendix and the three fecaliths in sacculations of the appendical lumen.

The examination of the resected specimen, Fig. 1, revealed the appendix to be 8 cm. long and from 2.5 to 3 cm. in diameter. The serosa was smooth and mildly hyperemic. The appendicular wall was firm and varied from 0.5 to 1.0 cm. in thickness. The mucosa was thickened and in several places formed sacculations in which the star shaped fecaliths were found. Microscopic examination of the appendix revealed the thickening of the wall to be due to the formation of dense connective tissue that separated and partly replaced the muscle fibers of the muscularis and extended to the serosal surface. The tissue was infiltrated by plasma cells and many eosinophile leukocytes and histiocytes. These cells were scattered diffusely and formed a dense accumulation about the blood vessels. The mucosa was thickened, because of the general hyperplasia of the lymphatic tissue which contained numerous germinal centers. The glands were fairly intact and the stroma was infiltrated by eosinophile leukocytes. The microscopic diagnosis was that of a hyperplastic chronic appendicitis and periappendicitis.

The fecal concretions were yellow brown and their surfaces were rough and granular. Two of these fecaliths, Fig. 2, were star shaped, one with a central body and five rays and the second with four rays. The third

Fig. 2. Star shaped fecaliths.

fecalith assumed the form of an H. A cross-section of the two star shaped fecaliths showed a nucleus which consisted of a soft gray brown granular ovoid mass about 2 and 4 cm. in diameter respectively, which appeared to be inspissated feces. This nucleus was surrounded by narrow gray-yellow lamellations that extended into the spinous processes. The outer lamella was somewhat thicker and more granular than the inner layers and formed a shell around the entire concretion. The H shaped concretion failed to reveal any definite gross nucleus, but the lamellar arrangement was similar to that of the other two fecaliths.

Chemical examinaton revealed the calculi to be composed chiefly of calcium oxalate.

Comment: The pathogenesis of these star fecaliths is probably governed by the same factors that cause calculi elsewhere in the body. As demonstrated by Schade,[5] calculi can be produced by the precipitation of a mixed solution of a colloid and crystalloid. As the colloid is precipitated, the precipitate has the property of forming in layers on the bottom or sides of the vessel or around a foreign object. During the process of precipitation the

crystalloids which are suspended in the colloid solution are carried down with the colloid precipitate, so that they appear as crystals in the amorphus stratum of the different colloid layers.

The appendix in the presence of stasis offers favorable conditions for the formation of calculi. The mucus secreted by the appendicular mucosa is an irreversible fibrin colloid which when precipitated from solution is deposited around foreign bodies or inspissated feces. Crystalloids such as calcium and magnesium phosphates and carbonates and occasionally calcium oxalate are precipitated with the colloid and are intimately mixed with the latter in the calculus. Retention of the calculus in the appendix over a long period will enable it to increase in size by the constant addition of colloid and crystalloid, so that the fecalith may become much larger than the lumen of the appendix. Such calculi are found in saccalations of the appendicular lumen. Prolonged stasis in the appendix may likewise enable more than one crystalloid to enter into the formation of the fecalith. The various strata of the calculus may therefore contain different crystalloids.

The structure of the crystals is an important factor in determining the shape of the calculus. This is demonstrated by the different forms the renal calculi tend to assume in relation to their crystalloid content. This relationship must exist for calculi formed elsewhere than in the urinary tract. In our case calcium oxalate was isolated so that like the irregular "star" or "Jack" shaped calcium oxalate calculi found in the urinary tract, the fecaliths herein reported assumed irregular forms.

The changes produced in the appendix were those of a prolonged chronic inflammation. The role that chronic inflammatory conditions of the appendix play in the pathogenesis of the fecaliths is debatable. Mild catarrhal inflammation of the appendix, probably, causes an increased secretion of mucus which in the presence of stasis establishes adequate conditions for calculus formation. Once formed, the calculi, unless expelled into the cecum, act as a source of constant irritation to the appendicular mucosa and stimulate the excretion of more mucus, which in turn furnishes the required colloid for the growth of the calculus. It may be, therefore, that chronic inflammation of the appendix may be both a cause and result of appendicular fecaliths.

SUMMARY

A case of chronic hyperplastic appendicitis is reported in which three star shaped fecaliths were found.

The calculi contained calcium oxalate to which is attributed their irregular shape, like that of calcium oxalate calculi met elsewhere in the body.

The hyperplasia of the appendix and of the ileocecal lymph glands simulated hyperplastic ileocecal tuberculosis.

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DIABETES MORTALITY IN NEW YORK CITY DURING THE THIRTY-YEAR PERIOD 1901-1931

Godias J. Drolet, New York (*Journal A. M. A.*, March 11, 1933), states that in New York City, from 1901 to 1931, the recorded mortality from diabetes has risen from 503 to 1,921; or, from a crude rate of 14.2 per hundred thousand to 27.1, and from a standardized death rate of 17.3 to 27.9. Among females, diabetes mortality has increased more rapidly; the death rate, standardized, having been 16.3 in 1901 and 35.5 in 1931; whereas among males, adjusted similarly, it has changed only from 18.3 to 19.0. Among men past the age of 55, the diabetes death rate in New York City has, however, measurably increased; among women, the rise begins earlier, namely, at 45 years of age; and their death rate has gone up markedly. The population of New York City is almost 30 per cent Jewish, and in this racial group the proportion of diabetic deaths to all other causes exceeds markedly that of the non-Jewish white population of the city. Among the colored races, the death rate has been lower than in the white race, but the same excess among females has been noted in both groups. While a comparative shortage of food during the World War has here too been followed by some diminution of diabetes mortality, the use of insulin since 1923 has been accompanied by only a slight recession, which has been entirely lost since.

DISCUSSION OF TECHNIC OF RADICAL BREAST OPERATION*

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While the technic of radical removal for malignancy of the breast has been sufficiently standardized, and apparently needs no further elaboration or addition, a discussion of the finer points in technic may not be out of place.

In no other operation is the technic so closely related to the anatomical and pathological factors concerned. We will endeavor to emphasize the motivation for the various steps in technic, as we believe that it makes for a safer operation.

We are not committed to any particular type of incision, but insist that it start on top of the shoulder, at its highest point. The incision then runs parallel with the outer half of the clavicle and curves down vertically on the chest wall, so that its concavity faces the axillary fold and is about two and one-half inches from it. From there on, it runs downward to about an inch above the upper circumference of the breast, where the line divides into two branches on either side of the nipple. The incisions encircling the nipple are about three-quarters of an inch from it on each side. About an inch below the lower circumference of the breast, these two lines meet again, running vertically downward along the outer border of the rectus muscle to one or two inches below the level of the umbilicus. (Figure 1.) This incision, as well as the rest of the operation, is done entirely with the high frequency knife. The rationale of this incision is based upon the fact that the final scar will be remote from the axillary structures and will prevent compression or binding of the arm. (Figure 2.)

The line of incision just described is deepened with the high frequency knife, the spurters are clamped and tied, while the less conspicuous bleeders are seared with the knife, thus avoiding ligation of many vessels. As the cut surface deepens and reaches the chest wall, the assistant folds a lap-pad on the entire edge and exerts gentle compression. The next step is the divi-

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Fig. 1. Showing healed incision for radical breast operation seven days post-operative. Note that the incision begins on the top of the shoulder at its highest point.

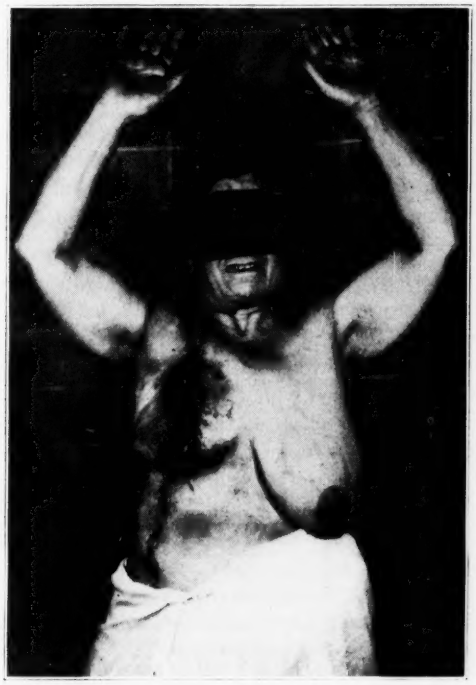

Fig. 2. Showing patient raising arm on side operated on to maximum normal extent on seventh day after operation.

sion of the pectoralis major muscle an inch and a half from its insertion in the humerus. The cut surface of the muscle is carefully seared. The thoracic insertion is divided until enough muscle can be lifted up from the chest wall to serve as a handle. The dissection is continued by grasping the muscular handle until the entire muscle is detached, enabling the surgeon to detach and lift up the entire mammary gland without handling it at any time. We believe that the use of knives, sponges, and the manipulation of breast tissue scatters carcinoma cells into the tissues, thus making neoplastic implants possible.

After the removal of the breast, the exposed chest surface is covered with warm pads. We believe that evaporation of the exposed surface is harmful and must be constantly prevented. The pectoralis minor muscle is next removed in a manner similar to that of the major. The muscular edges can be made conspicuous by slipping the index and middle fingers under the muscular surface and lifting it up. The cut surfaces of the muscles are carefully seared. Further protection by warm pads now becomes necessary.

These procedures cover about two-thirds of the operation and we would suggest that they be designated as Part 1 of the operation.

Part 2 consists in the anatomic cleaning of the axilla. We insist upon two points: first, primary exposure of the axillary vein for a distance of about two inches; and second, block dissection of the axillary space.

We believe that it is a decided advantage to primarily expose the axillary vein, as it is less likely to be injured if one works away from it rather than towards it. All branches of the vein and artery, which run almost perpendicular to the direction of the vessels are clamped with mosquito forceps and ligated with 00 catgut. We like to call this dissection *combing* dissection. This is started from the axillary vein towards the axillary pit and the upper end of the arm, taking everything in its course except the respiratory nerve of Bell, which is primarily isolated and not accidentally discovered. The mass is removed en bloc, and if carefully done does not need to be supplemented. Additional cleaning of fat now becomes necessary above the axillary vein and perhaps toward the insertion of the serratus magnus muscle, where masses of fat seem to be independent of the axillary mass.

Throughout the entire operation, the assistants see to it that the field of operation is well covered with warm pads. This completes the essentials of the operation, as it presumably removes all the pathologic structures in site.

The final touches consist in checking up bleeding points. At this juncture, it is quite important to mention that a number of small vessels on the chest wall often require ligation and that in clamping these, the apex of the mosquito forceps should be parallel with the chest wall rather than perpendicular, as most ambitious assistants and even surgeons have a tendency to do. The force of such clamping, especially if heavy forceps are used, frequently tears the intercostal muscles and exposes or even occasionally injures the pleura. The high frequency knife will take care of most bleeders, although injury to the pleura is possible even with this procedure. The entire cut edge of the skin is now gone over with the high frequency knife to destroy any possible implants and to complete the searing of bleeding points. This knife is subsequently used on the chest wall for the same purpose. This we consider a very important step in the operation, because it cuts off all lymphatic connections in all directions.

We next sear again the cut surfaces of the pectoralis stumps as well as their surfaces. In this way, we are reasonably certain to divide the accessory lymphatic trunks which are occasionally present and are known to pierce the substance of the pectoralis major muscle. By way of legitimate criticism, it may be apropos to remind the reader of the technic of Bryant of London, who for many years used the pectoralis muscle as a protective pad against the axillary space. A similar technic was used by J. B. Murphy. We feel that they were both in error when they thought that recurrences in the pectoralis muscle do not occur, on the ground that the muscle itself is free from lymphatic connections with the breast proper, the lymphatics traveling along the fascia.

Finally the lower part of the incision is gone over with the high frequency knife in the manner suggested above until the upper end of the rectus muscle is exposed. Fascial coverings are incised with the knife perpendicular to the long axis of the rectus muscle, curving the incision

inward and outward until the chest grooves are met. The object of this last procedure is to cut off lymphatic connections between the sheath of the rectus muscle and the chest wall. This has been described and proven by Handley as an avenue for direct carcinomatous invasion of the liver, metastases sometimes occurring in the liver before there is an invasion of the general circulation.

The operation being completed, the two cut edges are temporarily approximated to survey, as it were, the final alignment of the incision. A stab wound is made in the flap of the axillary line and a large cigarette drain inserted.

The skin is approximated with silkworm gut only at two points, the rest of the incision being put on stretch and approximated with skin clips. We mentioned before that carcinoma cells may be scattered into the tissues during the surgical procedure. Likewise, cancer-cell implants may be introduced into the substance of the skin when it is pierced by the sharp silkworm gut needle. It therefore becomes obvious that any method in which the skin is sutured may be subject to cancer implants. An ideal method is one which eliminates all suturing. This can be accomplished by the general use of skin clips or by the approximation of skin edges with adhesive plaster strips sterilized over an alcohol flame.

While asepsis is the rule of all good surgery, we often wish that some infection might occur in this operation. We base this paradoxical and seemingly unscientific statement on the experiences occurring in the practice of Dr. Schrager. One such case may serve to illustrate the point. A large, fungating, yet entirely local carcinoma (without evidence of metastases) was operated on merely to remove the foul-smelling mass, and without any hope of cure. The operative area became extensively infected by a staphylococcic organism. Everything down to the ribs and clavicle sloughed out, leaving a clean, granulating surface after four weeks. This area was subsequently skin-grafted. This obviously incurable case continued to live for ten years without any evidence of recurrence. The patient eventually died from pneumonia. Our conclusion from this and other cases seems to justify the statement that an extensive infection with recovery leads to an occlusion of all lymphatic avenues and a firm wall of connective tissue subsequently appears in all directions.

Reviewing our technic, we claim the following merits for the procedure:

1. The placing of the scar away from the axillary fold and axilla, thus permitting free range of motion of the arm soon after the operation, and continuing thereafter.

2. The use of the high frequency knife in searing smaller vessels and lymphatics, and otherwise expediting the technic which, we feel, lessens the time of the operation and avoids physical insults which favor malignant implants.

3. The removal of the breast without handling it at any time also obviates carcinomatous implants.

4. Searing all the margins of the incision as a final procedure, and cutting off of the fascial connections with the serratus magnus and especially the rectus muscle insures against local recurrence and early atypical lymphatic metastases, such as those in the liver and pleura.

5. Closure of the skin by methods other than suturing.

Finally, we have been able by strictly adhering to this technic to finish the operation within one hour and occasionally in a little less time.

INCREASED SUSPENSION STABILITY OF THE ERYTHROCYTES: ITS FREQUENCY IN ALLERGIC INDIVIDUALS AND THEIR RELATIVES

Kamil Schulhof, Chicago (*Journal A. M. A.*, Feb. 4, 1933), points out that an extremely slow sedimentation rate of the erythrocytes is a constant symptom in allergic persons unless they show evidence of a complication, especially infection, which tends to accelerate the sedimentation. As an infection may mask the expected slow rate, so may an allergic individual show a slow rate even in the presence of a serious infection of short duration, such as a gangrenous appendix. The interaction of the two opposite tendencies should be taken into consideration in the diagnostic and prognostic evaluation of the sedimentation rates. Sudden postoperative mishaps may occur in patients with abnormally slow rates. Besides the patients with known allergic conditions, a slow sedimentation rate seems to be fairly constant among patients with lumbago. Liver treatment seemed to account for the slow sedimentation rates in other patients. The frequency of slow sedimentation rates among apparently nonallergic close relatives of allergic patients is striking and deserves a closer investigation. A difference in the technic may partly explain the fact that the slow sedimentation rates have been overlooked clinically.

DIETING

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ELGIN

Has this prolonged period of depression any benefits? Do the people eat more of the simple foods which are less refined and therefore better? The answer to both questions is yes for the majority of people. However the matter of dieting is still out in front with a large group of society folks. Apparently the pendulum is starting the backward swing.

Women in general, who have so many little group meetings at nearly all of which some eating of food rich in carbohydrates constitutes an important, often the most important, feature of the party, are in the larger group of offenders.

Since the followers of Dame Fashion believe it is the proper thing to be slender, dieting is a popular subject for discussion at social clubs and elsewhere. It has become a fad. They want to be thin regardless of proportion or distribution of body weight. Many times in recent years, mothers have come to this office to council about that lean daughter and wanted something done "to build her up." The daughter invariably would object "I don't want to be fat," confusing of course the two conditions of good nutrition and obesity.

For sake of brevity we may state that there are two causes for too much fat deposit. Too much fat producing food eaten is the cause in the vast majority group. In the minority group the cause is disfunction, or disease of certain glandular structures, or the lack of endowment of them.

All methods of reducing are improper unless there is a sensible reason for it. The desire to be beautiful as measured by the rule of fashion is the controlling motive.

There are three essentials in a beautiful human figure. A well proportioned framework, skeleton; The soft parts covered by the skin with its embellishments; and *health*.

The human frame is upholstered, as it were, with internal organs, muscles, tendons, fascia, nerves, bloodvessels, and a liberal distribution of fat covered by the skin. Viewed externally, the finished product presents a series of long and short curved lines. If these lines are of the right proportions, they constitute beauty. The eyes, eye brows, hair, teeth, and fingernails are only embellishments. Those who do not have a well proportioned skeletal form can never be the most beautiful, however they may enjoy good health.

Improper dieting may invite disease by lowering the resistance. Disease may change the shapely figure either in the skeleton, soft parts or both and result in an ugliness of form.

The danger of lowering the resistance to disease is obvious.

Physicians with considerable experience, have seen disastrous results from unwise dieting.

Health is essential to beauty but it is quite compatible with homeliness. Ask your family physician what to do when that urge to reduce comes on you. Dame Fashion is not a good anatomist and rates poorly as a physician.

Since many of the laity read this journal, this article is written primarily for them.

QUESTIONING THE SKIN*

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After discovering the cause of tuberculosis, the great scientist, Robert Koch, continued to pry into nature's secrets. Working with guinea pigs, he noted that if he injected living tubercle bacilli into the skin of a healthy guinea pig nothing happened for from ten to fourteen days. Then the skin at the point where the injection had been made became red and swollen, and broke down forming an ulcer which refused to heal. Professor Koch inferred from this that the skin of a healthy animal had no power to resent the presence of the germs and their poison, but later acquired this power to a moderate degree, enough to cause an inflammation, not enough to heal it. When he chose a guinea pig which had been ill with tuberculosis for some time, the injection of living or dead bacilli caused a prompt reaction on the second or third day, which ulcerated and soon healed. Here, he reasoned, the power to resent the presence of germs and their poisons appears much more quickly and strong enough to result in early healing. The skin has become more powerful to overcome the poison, and has been made so by the general infection.

*Radio talk given from WAAF November 4, 1933, for Educational Committee, Illinois State Medical Society.

These observations led him to the discovery of tuberculin—an extract of tubercle bacilli.

Some years later, Von Pirquet, the great children's specialist in Vienna, used this fact to question the skin of the patient as to the presence or absence of tuberculosis in the body. Tuberculin is rubbed into a scratch on the skin of the patient. If the skin responds with inflammation within a certain time, the answer is "yes, there is tuberculosis somewhere in this person's body." If the skin does not respond, the answer is "no, no tuberculosis."

This test, with its modifications, has been of great assistance in the diagnosis of tuberculosis. It has also taught us much about sensitization, the acquired ability to react with inflammation to irritants that do not cause such a reaction in normal skin. This subject is being studied intensively; new facts and new view points are being constantly brought to light.

After bread has been exposed to the air for some time it is common to find greenish or gray spots of mold upon it. These are due to the growth of a tiny vegetable organism, a fungus. Similar organisms growing in the skin cause ringworm, a disease which takes various forms, often imitating eczema and other skin diseases and is not always easy to diagnose. One of our aids in the diagnosis is a skin test. A vaccine made from a growth of the ringworm fungus is killed, tested to be sure that all the organisms are dead and a very small amount injected into the skin of the patient's forearm. If within a certain time an inflammation appears at the point where the fungi were injected, the answer of the skin is read as "This patient has a ringworm infection somewhere."

An associate of Professor Pirquet, Schick, has devised a means of questioning the skin about diphtheria. The answer by inflammation in this case, however, does not mean that the owner of the skin has the disease. The skin answers "My owner is not protected against diphtheria. If exposed, he may catch it." There is not enough antitoxin in his blood and tissues to neutralize the poison injected into the skin. The physician, on perceiving the answer of the skin, administers toxin-antitoxin, which helps the person build up the needed protection. If the skin gives no answer to the test the doctor feels assured that even though exposed to diphtheria the person will escape infection.

The Dick test for scarlet fever, devised by two Chicagoans, like that just described, shows, if positive, that the patient is not protected. The skin answer is "This person is not protected from scarlet fever. He may catch it if he is exposed." If the skin makes no response to this form of questioning it means that the toxin injected has been neutralized and that the patient has enough power of this kind to protect him from the disease.

There are several less common infectious diseases in which skin tests give us important information.

Every one knows about the skin tests in hay fever and asthma. Urticaria, commonly known as hives, many cases of eczema, of spastic colitis, a cause of abdominal cramps, and of migraine, known as "sick headache" are in the same class as asthma and hay fever, all caused by "sensitization," a condition in which the skin, mucous membrane, or intestinal muscles have become very irritable, so that the mere contact of certain substances causes a great disturbance. The same substances cause no trouble at all to a normal person.

The skin is questioned to find out which of many substances is the offender. The scratch test, performed just like the Von Pirquet test for tuberculosis, except that other substances are applied to the scratch, often gives information of value. Soon after it became popular, however, it was discovered that its answers were not always reliable. When it said, for instance, that a certain patient was sensitive to pork and that patient happened to be a Jewish rabbi, the answer was decidedly open to question. Then it was found that many of these answers of the skin are "group reactions," that when a patient becomes sensitized to one substance he has also a certain sensitization to a whole group of chemically related substances.

It was also found that the answers of the skin vary from time to time depending on changes in the condition of the patient. Interpretation of these skin answers is not always easy.

More recently it has been found that simply placing a suspected substance on the skin, keep-

ing it there for 48 hours, more or less, will give better information in cases of eczema than the scratch tests. The upper layer of the skin, the epidermis, gives a better answer in this case than the deeper portion. This is called the patch test. It, too, varies from day to day and often is different on different parts of the same person. All parts of the skin are not sensitized. A patient of mine, for instance, was sensitive to one of the ingredients of an eye lotion; but only the lids of one eye were sensitized. No reaction occurred on the other side.

After the skin has given its answer, it is checked by removal of the indicated substance from contact. If the skin irritation subsides, the contact is renewed. If the irritation then returns, to disappear again with removal of the suspected substance, then, and not until then, do we feel quite convinced that the answer of the skin was correct. If these changes are not productive of the proper results, further search is necessary. As they try to visualize all the contacts possible to any one person in a day, the doctors thus questioning the skin realize as never before how complicated are our lives.

Of all cultivated plants, the primrose is the commonest cause of skin eruptions. A gardener complained of a severe dermatitis that kept him out of work. So long as he remained away from the plants his skin was clear; when he returned to work he soon noticed the torturing itch and the eruption. Of course, the primrose was at once suspected. However, patch tests were made with all the plants he ordinarily handled. Contrary to expectations, the answer came, "Primrose leaves and flowers are not guilty. The chrysanthemum is the guilty one."

So with a newly married couple, who were on the point of separation, because every time the husband, who was a traveling salesman came home he broke out with a terrific itching eruption. Several doctors said that there was an incompatibility of temperament; but the patch tests on the skin said, "No, the trouble is with the perfume that the lady uses." The lady gave up her perfume instead of her husband, and all was well.

These answers of the skin are being used in many lines of research. Our knowledge of sensitization, its causes, and the possibilities of treatment, is growing day by day and as a consequence our ability to relieve distress is becoming daily greater.

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THE EVOLUTION OF MEDICINE*

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I am embarking on an adventurous and exciting proposal, and I invite you to come along with me. I shall try in my humble way, in the course of three short talks, to survey the story of the development of the science of medicine. Naturally, only the most interesting high spots will be discussed. In today's talk I shall speak of the origins of medicine; in the second, the middle period will be presented and in the last lecture some of the modern developments of this interesting and vast science will be outlined.

The origins of medicine began with primitive man, and arose out of natural human sympathy, out of a desire to help those in pain and distress. Mothers heard the anguished cries of their children, people saw loved ones suffering, they felt their own aches, and so they called upon the gods and searched out their accumulated experience to ease the suffering and cure the sickness.

But this was long before the dawn of the age of science. Before rational experimentation and the careful weighing of results in the light of known causes. The mind of primitive man in its attempt to understand the nature of the world about him was steeped in superstition and error. Primitive man could see no causal relation between an object, its shadow and the high sun; or between a sound and its echo. Winds, storms, clouds, sickness and death were to him the outward and visible signs of malevolent gods, demons, spirits and other supernatural agencies. He, therefore, worshiped the sun, moon, stars, the trees, fire, the winds, and looked to them for signs and portents to guide his life and health. Spirits of the dead, demons, or individuals with some mysterious power over the agencies of disease or their general well being, were feared; their assistance needed to be invoked, and their

*Series of three radio talks given over WJJD, for Educational Committee, Illinois State Medical Society.

anger propitiated. Incidentally, in some of the Southern states today, a negro who learns that a malevolent witch-doctor has put a hoodoo on him will, through his fear and belief, becomes very ill, indeed. He is relieved only by a more powerful hoodoo.

Ancient man lived largely under the open sky. He watched the rhythm of the heavenly bodies. He thought he saw coordinations between their movements and man's well being. Particularly was he struck by the close relationship between the lunar months and the recurrent illness of his women. Hence, the development of astrology, preserved today in the signs of the Zodiac. Every almanac is filled with remnants of this vast superstition—such as the desirability of preparing meats or planting grain at a certain time of the moon.

Weeds and leaves and roots and plants and berries, as well as hair and skin and blood and excretions of animals were the chief sources of medicine prepared and used by primitive men. Many things were used from custom, i. e., empirically, not on account of their usefulness, i. e., experimentally. However, experience taught the value of applications of heat and cold, and of the relief which may come from inducing vomiting or of blood-letting. Of considerable interest and wonder to us, but of somewhat less actual value to them, was the custom of trephining, or opening the skull down to the brain to allow demons to escape.

Probably the most important health lessons came to primitive man from his attempts to deal with the injuries, accidents, and bites of beasts and serpents. It was from these experiences that he began to learn the immensely important principal of the relation between cause and effect. Many of these injuries were disabling, and thus gave ample opportunity for observation, which is the true beginning of a true science. In this crude way medicine had its rise from the experience of recovery of some patients, the death of others; and the lessons of past attempts and their results were remembered. Man learned to distinguish the hurtful from the helpful, the useful from the useless. He gradually learned that cold under circumstances may produce pain in the chest, shortness of breath and secretion of mucus. Again, he noted the soothing effect of heat in this condition. When he used certain plants as food, he could scarcely fail to note the fact that some were followed by pleasant after-effects, and some by an acute distress.

Each illness was thus a source of learning and experience, and each mistake a reminder of what might better be avoided in the future. But the process was slow and laborious.

The three main staples of medical lore were, thus: 1, the power of spirits and demons; 2, the medical qualities of herbs and roots and other objects; 3, the wisdom inherent in the movements of the heavenly bodies.

The power to use and understand these staples became the specialty of real or often self-assumed experts, or "medicine-men." It was the duty of the medicine-man, who was invariably also the priest or religious leader, to appease the evil gods, invoke the good gods to aid them, offer sacrifices, brew the stews and broths which he believed indicated, study the stars, and vanish illness and pain or shame and disgrace thereby. It was he, too, who devised and distributed the amulets, talismans and medicine stones, as charms to be carried or worn.

Widely separated races of primitive man appear to have adopted almost identical means for this combating of illness and pain. Whether this is due to the phenomenon known to sociologists as the cultural diffusion, or whether it expresses a necessary fundamental similarity in the brain processes of all men need not in this series of brief talks concern us.

Let us leave the far distant and dark past with its superstition and ignorance, and come to the period of the opening of the Christian era. Here Greece, with its men of powerful intellect and ability to interpret cause and effect in the light of reason, attract our attention. Just to name a few of these men, I hope, will stimulate your further interest.

The thoughts of Hippocrates, Galen and Aristotle governed the minds and actions of men for centuries. Their writings are full of thoughts eagerly sought today.

We have seen that in the primitive man the physician evolved from the priest. In Greece he had a dual origin, from philosophy (or reason) and religion. They established schools where the anatomy and the physiology, or mechanics of the human body were studied. Methods of surgical operations were devised

and much attention was given to pure water supplies, sewage disposal, bathing, and infant and maternal welfare.

Aesculapius, the father of medicine, and Hygeia, his daughter, were Greeks. He, along with Aristotle and other philosophers introduced a more rational practice through the medium of thought and reason—but still failed to use experimentation—or the scientific observation of cause and effect. The inscriptions show that great attention was paid to diet, exercise, massage and bathing. Cleanliness and hygiene at last appeared worthy of consideration, but we shall see that in later centuries most of this was forgotten or lost, only to be re-discovered in the modern period of our own century.

Hippocrates preserved to us his experience and thoughts in writing. The present day much misunderstood code of medical ethics dates back to Hippocrates. He apparently considered his calling sacred, for the famous Hippocratic oath, which is followed by all true medical men, says: "While I continue to keep this oath unviolated, may it be granted to me to enjoy life and practice of the art, respected of all men in all times. But should I trespass and violate this oath, may the reverse be my lot."

2. MIDDLE PERIOD

In my first lecture I invited you to come along with me on an adventurous and exciting proposal. In the course of three short talks we are surveying the story of the development of medical science, limiting ourselves to discussion merely of the most interesting high spots. The first talk dealt with the origins of medicine. We saw that the three main sources of medical lore among primitive men were first, the powers of spirits and demons; second, the medicinal qualities ascribed to herbs, roots and other objects; third, the wisdom inherent in the movements of the heavenly bodies. We saw that these main staples were the monopoly of the medicine men of the tribe who were expert in appeasing the gods of evil, in brewing the stews and broths which cured disease, in studying the stars, in devising and distributing amulets, talismans, medicine stones and other charms to aid in banishing illness and pain. Toward the end of our first talk we touched briefly on the development of medicine in the time of the Greeks. We saw that in the time of Aesculapius, the father of medicine, great emphasis was placed upon thinking about illness, and less about superstition; but the important thing to remember is that even in the period of the Greeks scientific experimentation to discover the cause and cure of illness had not yet been discovered or adopted. Today we deal with the middle period in the development of scientific medicine.

During the period from the decline of the Grecian culture and the fall of the Roman Empire, to the end of the 13th century, very little was added to medical knowledge. In fact, all knowledge and culture suffered a decline during these well known Dark Ages. This was a period of depression in the advance of all civilization. The work of primitive man with the Greek additions was followed and reviewed and restated from century to century. In many countries the advice of the ancient writers was a law to be followed. Any one using an idea of his own was a dangerous man and subject to extreme penalties.

Then came the dawn of the 14th century—the Renaissance—the period of enlightenment, when science emerged from religious control, gave free vent to scientific investigation and has made constant advance up to our time.

Early medical training depended only upon an apprenticeship with a physician. But now great universities were founded where anatomy, physiology, chemistry and biology were taught. Thus with a single stroke was undermined the influence of ignorance, the father of quackery. Not that even today are we free from quackery. But it is being hunted out every day. People are wanting to know the training and standing of their physician, and not how good he himself says he is.

Paracelsus early in the 16th century studied widely, and must have seen science with a modern view. He was to medicine what Martin Luther was to religion—the spirit of revolt. He refused to follow blindly authorities whom he proved in the laboratory to be wrong. He emphasized the study of chemistry, botany, zoology—the natural sciences. He wanted to know more about plants, animals and the chemicals which he saw daily, salt, plant juices, blood, urine, animal tissues. He progressed through research and observation, and believed only what he could verify by experience and

experiment. He believed that neither books nor fluency, nor languages made a physician, but the knowledge of the things themselves and their properties. The business of a doctor was to know the different kinds of sickness, their causes, their symptoms and their proper remedies.

A tremendous forward step was taken when William Harvey discovered that the blood was not a stagnant pool but a rapidly circulating fluid, and initiated a study of its properties. The microscope, invented by an unknown Dutch glass grinder, made it possible to see for the first time the blood cells. In fact, the movement of the blood itself as it coursed through the tiny veins in the web of the foot of a frog. For the first time man could see the blood move inside of a normal, comfortable animal. Everything was looked at in the hope of finding other things like the little round specks floating in the blood. Respiration and body temperature were for the first time considered in their relation to health and disease.

The middle of the 17th century saw the profession thus far on its way. Certain objective features of disease were known, the art of careful observation cultivated, many remedies had been discovered, the coarse structures of man's body well worked out, and a good beginning had been made in the knowledge of how the machinery worked, nothing more. What disease really was, where it was, how it was caused, had not even begun to be discussed intelligently.

Quinine was the first specific remedy discovered. About 1650 a lady of the court fell ill with the ague. A friend advised the bark of a certain tree—she was cured. It was tried on others. They were all cured. Study of the bark by chemists revealed a white powder-quinine, today the universal remedy for malaria.

Digitalis, our great heart remedy, was accidentally discovered through the successful ministrations of an herb-doctor, who knew nothing about what she was using, but knew she got results.

Then came Jenner, a country doctor, who revolutionized thought and practice, with smallpox vaccination which reduced the incidence of that dread disease in Germany from 75 to 5 per hundred persons almost immediately. Men were following the dictum of John Hunter, "Don't think, try."

Then came Pasteur, Koch and Lister, using the microscope from a previous generation, began to try as well as to think. Out of their simple tubes and dishes and soups and broths came, not superstitious broths to appease angry spirits, but knowledge of bacteria, disease germs that can be seen and handled and controlled. They found these small germs in wine, in yeast, in the throat of a child dying with diphtheria, in a tuberculous lung, many different kinds, but they studied each one and proved to the world that these certain germs were always present in certain diseases, in short, they explained the cause of disease for the very first time.

Occasional emergency operations such as amputations had been done for many centuries. But they were undertaken with fear and trembling, by doctor and patient alike. Most of these were followed by severe infections, many by death. It has been only in the last half century, thanks to the study and experiments of hundreds of scientists, that one can undergo a major operation with assurance and relative comfort.

Queen Elizabeth summed up the hygienic status of the time, when asked about her use of the new-fangled bath tub which she had. She bathed the first of every month whether she needed it or not. It did not seem ridiculous to dispose of sewage in the moat about the castle and later use this same water from the moat for swimming and cooking or even drinking. But thanks to health study many modern changes were being made in the daily lives of the people.

Let me briefly summarize: In the middle period the use of true scientific knowledge came to give new direction and success to man's age long struggle with disease. The causes and cures were being discussed and studied intelligently. Germs were being isolated, schools were established. Success and achievement were the reward of the surrender of superstition and the acceptance of guided rational inquiry.

We shall trace these developments into the present day in our third and last lecture.

3. MODERN PERIOD

In my two preceding talks I have sketched the evolution of medical science through a series of upward steps—a primitive stage, in which it emerged from magic and superstition and religion; a stage in which the natural character of disease was recognized, and the importance of its study as a phenomenon of nature realized; a stage in which the structure and functions of the body were worked out; a stage in which the causes of disease were profitably studied, and a final stage, into which we have entered, the application of knowledge for their prevention.

"Prevention" is the watchword of modern medicine. How would you feel today if you knew that the great methods of preventing the common diseases were beyond your reach? If you could not obtain, if need arose, diphtheria antitoxin, rabies serum, serum to prevent tetanus or lockjaw, typhoid inoculation, insulin, toxin-antitoxin, meningitis serum, and many other proven measures?

Not more than a century ago sanitary experts began to discuss the miserable living conditions of the people. They pointed out as bad, but could not change, child labor in unventilated foul factories, unsanitary homes, lacking water supply, and poor or no soap. Most of the windows were sealed shut even in the basement homes on account of the high tax on windows. The clothing either could not be or frequently was not washed, and was worn until it actually fell off of the wearer. Windsor Castle, the home of the King of England, had dozens of reeking cess pools which were overflowing beneath it.

The poorest homes today have pure water, adequate sewage disposal, ice and heat—kings did not have these one hundred years ago.

Today, thanks to the accumulation of exact scientific knowledge, we have within a moment's call help for all emergencies and health needs.

Your family medical doctor has mastered the science of medicine and surgery in the best universities in the history of the world. He spent years and many thousands of dollars within the walls of schools, themselves having millions of dollars worth of equipment—laboratories, libraries, expert teachers and well equipped hospitals. He spent a year as an intern in some good hospital where he observed and assisted great physicians and surgeons. Finally, he is living in your own community, where his greatest ambition is to help you prevent a calamity in your home or community.

At the command of your physician or surgeon are the enormous libraries containing the accumulated experience of all times; the magazines weekly on his desk, with the daily experience of doctors all over the world, with the answers to problems just like your doctor and your community have every day; the 7,000 hospitals of the United States with investment of over three billions of dollars,—all these are his, and yours. Even in the small communities the hospitals are adequately equipped to meet every emergency and need.

One hundred years ago, the chances of surviving a surgical operation were so small that a guarantee of funeral expenses were often required on admission to the hospital. Today a sojourn in the hospital is almost as safe as a stroll down the boulevard. The hospital is a great hotel, with expert accommodation for the sick added. It is a model of cleanliness and order and routine. The great laboratories and trained doctors are ready and able to discover human weakness or disease, and the immaculate operating rooms stand ready to render their services quickly, efficiently and safely. Gentle hands allay the natural excitement, administer soothing remedies, and finally deliver the patient fully prepared to the hands of his surgeon; here a grateful anesthetic waves away consciousness, the patient is safely and comfortably relieved of his physical burden and in due time returned to his home.

One hundred years ago the nursing staff was inadequate and untrained. It was said that all that a nurse was supposed to know was how to make a poultice. The nurses were from the lowest strata of society. Today they must be high school graduates, and many of them have had one or more years of study in universities before beginning the required three or four years of nurses training. A more devoted and dependable group of women is difficult to find.

Forty years ago, appendicitis was almost unheard of, because it was not understood and therefore not recognized. Many people died of inflammation of the bowels, who today would have been operated upon early and relieved of

a pus filled appendix. Yet twenty-five thousand persons died of appendicitis last year—but only because they came too late for diagnosis and treatment. Almost one hundred per cent should be well and alive today. Accurate early diagnosis is the safest method of preventing many serious tragic results.

For hundreds of years millions of dollars and thousands of lives were spent in attempting to build the Panama Canal. Only failure was the result, not because of lack of engineering skill, but because men could not live there. Finally, a physician made it possible by one simple change in conditions. He eliminated the death bearing mosquito. Today the great Panama Canal is a monument to Dr. Gorgas and scientific medicine. The history of malaria and the difficulties overcome in discovering its cause is an interesting story.

Many of our most feared diseases are practically conquered. They at least are understood, and only waiting public knowledge and cooperation to wipe them off the face of the earth.

Cholera, yellow fever, malaria, typhoid fever, prison fever, the plague, black death, and many other dread diseases are almost completely gone, and will soon be largely of historic interest. Diphtheria, that great bearer of death to children, is fully understood, can be prevented by toxin-antitoxin, and cured if treated by antitoxin. Only lack of cooperation on the part of parents prevents its being eradicated. Tetanus or lockjaw and rabies are fully preventable, the latter curable. These rarely occur due to the fear of the people of their dramatic symptoms. A person may refuse to admit the presence of appendicitis or a goiter, but never lockjaw.

During the last decades great strides have been made in surgical diagnosis and technique, the treatment of tuberculosis, thyroid conditions and care of mothers and infants. One with early tuberculosis infection is not given up as gone, but is so carefully cared for that a large proportion of these people are returned to their homes well and strong.

Cancer we have always had with us. It has always received untold time and study. It is still an unsolved problem of our ablest minds. However, many cases can be and have been cured when treated early and properly. Many fake methods abound. Our only hope, in the light of present day scientific knowledge, lies in early diagnosis, and the use of surgery, x-rays or radium, singly or combined.

Thus in these talks we have traced the evolution of scientific medicine from the earliest struggles of primitive man with harsh nature; we have seen how he learned in his simple way to care for his family and himself in injury and disease; later disease began to be studied; the human body analyzed, and the final discovery that prevention, like possession, has many points in its favor.

6859 Stony Island Ave.

TUMOR OF THE KIDNEY: A REVIEW OF A SERIES OF CASES*

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A review of the records of renal tumors at the Cook County Hospital for a period of four years, 1929 to 1932 inclusive, is the basis for this report. Fifty-four patients with tumor of the kidney were admitted during this period. In many instances these patients presented a clinical picture which is not in accord with that usually described.

There is already an extensive literature on the subject of renal tumor to which there are constant additions, but I believe this brief review presents a few points of interest which warrant its presentation.

The cases were divided as follows: Three were retroperitoneal tumors, two of which involved the fatty capsule and produced hematuria. I feel that they can be included in this series. One was a large retroperitoneal lipoma which was explored but not removed. Four were embryomas or Wilms' tumor in children; all were advanced cases and, together with the retroperitoneal tumors, do not really enter into this discussion. Of the remaining forty-seven, three were tumors of the renal pelvis and one a large, benign adenoma for which I did a nephrectomy about two years ago.

The study of these cases impressed me as of considerable value for they present a cross section of the various clinical manifestations

*Read before the Chicago Urological Society, January 26, 1933.

of renal tumor. Some were admitted who showed frank evidence of tumor and metastasis and were practically terminal. Others, while not moribund, already showed metastases and required very little difficulty in diagnosis. Still others who had undergone nephrectomy previously—most of these were from other hospitals—presented themselves with metastases three months to three years later. A large number gave a definite history of lumbar pain and hematuria and had a tumor, all of which made diagnosis simple.

Pyelography confirmed or established the diagnosis in all but two cases in which a renal tumor was later found. One of these two was a man who had a hematuria with a doubtful mass in the abdomen but who showed cystoscopically a large stone in the bladder. The stone was crushed. The mass in the upper abdomen was thought to be a chronic pyonephrosis. Renal tumor was found at necropsy.

The other patient showed an apparently normal pyelogram. At operation for possible cyst-adenoma of the ovary a tumor of the kidney was found and the kidney removed. This tumor proved to be in the upper half of a double kidney which had a separate ureter that had not been catheterized.

The points of importance in this review are the following:

1. Nine of this series were diagnosed only postmortem or at operation or upon the finding of metastases.

2. Fourteen patients gave no history of urinary symptoms and in these patients urinary findings were negative while in the hospital.

3. Hematuria had occurred in only twenty-five of the forty-seven cases. It was usually a late symptom when the tumor was well advanced.

4. Tumor and loss of weight were the outstanding symptoms.

5. Local recurrences at the site of nephrectomy occurred in four cases.

Two cases previously diagnosed as carcinoma of the lungs showed on postmortem a primary renal tumor with pulmonary metastases. One had been diagnosed as carcinoma of the cecum but correct diagnosis was made postmortem.

Another diagnosed as tumor of the spine proved at necropsy to be involvement of the vertebrae secondary to extension of the renal tumor.

In one case there had been a spontaneous fracture of the femur. Findings postmortem were those of renal tumor with metastases. One patient had an osteoma of the radius removed. Biopsy showed renal tumor. Another had an osteomyelitis which had been curretted three times. Biopsy showed hypernephroma. One patient was operated upon for uterine fibroid; a renal tumor was found.

All who have had some experience with renal tumor can undoubtedly cite similar cases.

One patient with a tumor of the renal pelvis operated upon by me within the last month deserves special mention. This patient had, two years previously, been operated upon, apparently successfully, for tumor of the sigmoid. This tumor of the right renal pelvis was diagnosed by both Drs. Jaffé and Melnick, pathologists at the Cook County Hospital, as a metastatic carcinoma of intestinal origin. This, then, is a metastatic tumor of the renal pelvis, certainly a rare condition.

Another case which was diagnosed only after careful postmortem examination had been operated upon for tumor of the right kidney. This was very extensive and could not be removed. Necropsy showed a primary tumor of the prostate with retroperitoneal mass metastasis to the left kidney.

Another instance was a diagnosis by me of a left sided renal tumor. The mass, however, was fixed and grew very rapidly, almost from day to day. Further examination later revealed a small tumor of the left testis with metastases along the spermatic to the left renal vein.

One apparently early malignancy of the kidney showed upon nephrectomy considerable involvement of the renal vein. Another with a history of a tumor of two years' duration showed no infiltration into the renal pedicle. Two patients who had previously shown no evidence of tumor had at operation marked infiltration upward to the diaphragm. These were probably primarily tumors of the adrenal.

I have purposely not entered into the discussion of the pathology of these tumors. All the pathologic reports which were noted stated either adenocarcinoma or hypernephroid car-

cinoma. True hypernephromata are rare. As stated before, three were papillary carcinoma of the renal pelvis and one a benign adenoma.

The evidence of local recurrence at the site of operation seems to me to indicate an incomplete operation. The fatty capsule is frequently involved and, therefore, nephrectomy for tumor should be extracapsular wherever possible. If the tumor is large and extensive and extracapsular, nephrectomy is not possible; it is probably best not to attempt nephrectomy.

The most important points in this review are the frequent absence of urinary symptoms and the large number which were not diagnosed. Less than one-half of these patients were seen in the urological service.

104 South Michigan Avenue

THE TREATMENT OF PEPTIC ULCER WITH OKRIN; A PRELIMINARY REPORT*

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Experience indicates that gastric mucin is beneficial in the treatment of peptic ulcer.[1] Its value may be due to its viscosity and demulcent properties which enable it to protect the ulcer from chemical and mechanical irritation. In addition it may influence the synthesis of mucus by mucous membranes because it contains the necessary building stones of mucin, chiefly glycuronic acid (glucuronic acid).

Glycuronic acid is important not only in the synthesis of mucin, but also as a constituent of connective tissue cells. Ordinarily it is burned in the body, but it will combine with various toxic substances rendering them inert. Among the substances that thus appear in the urine conjugated with glycuronic acid are those containing the phenol group, indol, skatol, and others of this class. Glycuronic acid is evidently a normal intermediary product of metabolism. Although its origin is not known definitely, if it is not synthesized by the body it must be supplied by connective tissues of animals or in plants.

Many plants contain a mucilaginous substance rich in glycuronic acid. Therefore, we thought that the mucilaginous substances in various plants might be used with a benefit similar to that of gastric mucin. Among the plants studied by us, the pod of the okra plant (Abelmoschu esculentus) proved to be very rich in a soluble, mucilaginous substance that could be precipitated with 50% to 60% alcohol and prepared as a dry powder. This product gave a slight Millon's reaction for protein, contained 3% of nitrogen and no reducing sugar. However, it did give a Molisch reaction. When tested for "mucoitin" by the Leven method for mucoitin sulphuric acid, the yield was 19%. The material so obtained had a nitrogen content of 0.22%. The pod was analyzed for the amount of rind, inner fiber, and seeds as carefully as these could be divided. The seeds were removed readily, but it was difficult to remove the outer rind from the inner fibers. If the rind could be removed accurately, the percentage of the inner fiber would be materially increased. The results given are arbitrary. The analysis of the pod by weight was: seed 13%, inner fiber 36%, and rind 51%. The seeds contained no mucilaginous material excepting on the surface. The white inner fibers practically all dissolved in water and yielded a clear, viscous solution, while the rind formed a viscous solution containing coloring matter and insoluble fibers.

The material for clinical trial was prepared according to the following procedure. The okra pods were washed, and then ground in a food chopper, and the ground material stirred into ten volumes of warm water. After stirring the mixture and letting it stand from one-half to one hour, it was strained through muslin. The residue was soaked again in water, and strained. The extracts of the two strainings were combined, and 95% ethyl alcohol was added to make a 50% alcohol solution. The mucilaginous material gathered into long, tough strands which were worked together and removed from the solution. This material was washed repeatedly with 95% ethyl alcohol, then ground in alcohol, filtered from the alcohol, and washed with ethyl ether. It was necessary to remove the alcohol completely and quickly to keep the finished material from becoming insoluble. The material was dried and ground in a mortar to a fine gray powder which we called "okrin."

This alcohol-free powder retains its solubility and mucilaginous property in water for several months at least. It contains some yeast and mold spores, but is practically free from bacteria.

*From the Departments of Physiology and Medicine, Northwestern University Medical School.

Aqueous solutions of the powder standing at room temperature mold but do not putrefy. The powder may be sterilized by dry heat with but little loss of viscosity, but the aqueous solution loses viscosity on sterilization. It was tested for gastric secretagogues by perfusion of the whole stomach pouch of the dog, but was found to contain none. It is exceedingly viscous in aqueous soluton. A 0.5% solution takes 18.7 times as long as distilled water to run through a capillary pipette. Dissolved in distilled water it has an okra odor and taste.

Clinical Experience. The supply of okrin for clinical experiment was extremely limited. We therefore thought it best through this probatory period to restrict the use of okrin to intractable cases to avoid that large percentage of ulcer cases who have temporary remissions after any type of medical treatment. Three of the patients in the clinic having the most difficulty on other managements were selected. None of these patients was hospitalized; all were ambulatory.

C. W., male, aged 57, complained of recurrent epigastric pain for three years. A gastroenterostomy had been performed nine years previously for similar distress. Six months before our examination he was on Sippy management in a hospital. He continued to take alkali and milk and cream with slight relief. Roentgenological examination by Dr. James T. Case revealed a grossly and constantly deformed duodenal bulb, and a large diverticulum in the third portion of the duodenum. Practically all of the barium passing from the stomach during the fluoroscopic examination passed through the pylorus. The patient complained of some tenderness over the ostium of the gastroenterostomy, but also complained much more bitterly of tenderness over the region of the first portion of the duodenum. No demonstrable crater could be found at the gastroenterostomy opening, but the gastroenterostomy apparently was not functioning well. A fractional test meal showed a maximum of 56 clinical units of free acid and 68 total acid units. On introducing 200 c.c. of 0.5% hydrochloric acid into the empty stomach his typical pain was reproduced.

The patient was given two grams of calcium carbonate every hour, milk and cream every hour on the half hour, and fifteen drops of tincture of belladonna every four hours. He continued to have severe epigastric pain and vomited every night at about 3 a.m. After four weeks the alkali and belladonna were stopped and he was given okrin. One level teaspoonful of okrin was given in water every hour while awake, and three small meals were allowed daily. The patient reported that he had no pain or vomiting after three days of okrin management, but that he had slight nausea and dizziness, and that he had been eating melon of all kinds. After one week the abdominal tenderness and all symptoms had disappeared and the dosage of okrin was reduced to one teaspoonful every two hours. At the end of the third week the patient had reduced the dosage to six teaspoonfuls a day.

The okrin was taken for only three and one-half months because of the limited supply. Two and one-half months have elapsed since the okrin was discontinued without recurrence of symptoms. Re-examination roentgenologically at this time shows the barium passing through the gastroenterostomy opening promptly. No crater or evidence of marginal ulcer is demonstrable in the region of the new opening. The duodenal bulb is deformed as before. No particular difference in the appearance of the stomach as compared with the previous examination is noted. The stomach is deformed, evidently by the operation, but it is freely movable. There must have been an extensive perigastritis with adhesions to account for much of the gastric deformity.

W. H., male, aged 54, complained of a gnawing epigastric distress coming on from two to three hours after meals with innumerable recrudescences for the last ten years. There had been a loss of eight pounds in the previous two months. The pain had been relieved occasionally by soda, milk of magnesia, milk, or vomiting. For the previous four weeks there had been a sharper pain at the right costal margin which was sometimes worse after eating, but which was relieved by alkali or vomiting. Fractional test meal had a maximum free acidity of 48 and total acidity of 62 clinical units. A positive benzidene test was obtained with the stomach contents. Roentgenological examination by Dr. James T. Case revealed an organic prepyloric lesion with high-grade delay and an enlarged stomach.

After observing the patient for two weeks while on milk and cream hourly, an operation was advised, but refused. He was given one teaspoonful of okrin in milk or water every hour while awake. All symptoms were completely relieved on the second day. Re-examination three weeks later revealed a deformity of the pyloric end of the stomach and the duodenal bulb. The emptying time of the stomach was normal. Certainly there was an improvement over the previous examination when there was a rather high-grade gastric delay. At times the duodenal bulb had a fairly normal contour, but on most of the films it has a deformity which is not persistent. It is possible that this man has a prepyloric lesion with accompanying spasm and periduodenitis, producing this deformity of the duodenal bulb.

After four months of treatment the okrin supply was exhausted. The patient has had no okrin for two and one-half months, and contrary to instructions has eaten of everything, but has had no return of distress. Re-examination, however, shows marked spasm at the pylorus and persistent pyloric deformity.

A. Z., a male, aged 46, complained of epigastric pain of four months duration and a loss of thirty-two pounds in three months. Roentgenological examination revealed a grossly deformed duodenal bulb, the deformity being characteristic of duodenal ulcer. The stomach was hypertrophied and dilated, and a noticeable quantity of opaque material remained in the stomach after five hours. Ewald test meal had a free acid of 39 and total of 42 clinical units. After trying frequent feedings and soft diet for three weeks without relief he was started on okrin, taking one teaspoonful in water every hour and eating three meals with cooked vegetable and fruit. He had no pain, nausea, or abdominal tenderness after three days. After

two and one-half months of treatment no more okrin was available. Two months after stopping the okrin his distress had not returned and he had gained in weight. Re-examination roentgenologically reveals essentially the same appearance of the duodenal bulb deformity with practically the same amount of barium remaining in the stomach after five hours as before.

COMMENT

We feel hesitant to report observations of such short duration on only three patients. However, since considerable time may elapse before a supply of okrin may become available for use in a larger group of patients, we believe that the palliative results in these three cases are of interest. While we do not believe that the ulcers reported have been healed, the rapid relief of pain after such treatment may indicate a subsidence of the accompanying gastritis and duodenitis.

The fact that ulcers occur with normal or subaverage acidities and that some ulcers may heal without any lowering of acid values or in spite of an increase in acidity is evidence that other factors than hyperchlorhydria are involved in the chronicity of ulcer. It seems that only a small degree of acidity may be adequate for the acid factor, perhaps only enough to insure activity of pepsin. Mechanical factors then loom into importance in the production of chronicity of the ulcer and probably in determining its location. Mann, Morton, and McCann[2] considered "the active mechanical factor in the duodenum to be the force of the impinging stream ejected through the pylorus." They consider the mechanical factor in the stomach "to be the paucity of protecting rugae in the prepyloric segment, particularly along the lesser curvature with its poor blood supply, and the convergence of the lines of force as suggested by Aschoff." Any substance, therefore, which can be taken in amounts to protect adequately the mucous membrane from the force of impinging stomach contents and the friction of coarse cellulose foods should be of some value in protecting the reparative granulations and epithelial cells of an ulcer. This protecting substance might also protect the granulations from pepsin HCl digestion. Olive oil, cream, and other fats have been used frequently for a protective action as well as a secretory depressant action. Too much fat, however, causes nausea. The viscosity of gastric mucin makes it valuable, although it has been thought by some to be unpleasant and to contain secretagogues. Okrin apparently has a demulcent, protective action and contains no secretagogues. It is pleasant to take, and may be taken at frequent intervals without any untoward symptoms. Being a vegetable product it does not deteriorate or putrefy as do animal products. Because okrin relieved pain in these three cases that were not being relieved by other treatment, we believe that it has a palliative action which may be of value in the treatment of peptic ulcer.

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THE DANGER OF USING GASOLINE FOR CLEANING

The recent case in which a woman was cleaning a garment with gasoline in the open air and far from any flame, when a blaze occurred and she was burned to death, has directed attention to this danger. When dry fabrics, particularly silk, are rubbed in dry weather, electric sparks can be obtained. When fabrics are washed in water no such effect takes place, because water is a good conductor of electricity without the need of the leap through the air which constitutes a spark. Gasoline, on the contrary, is a nonconductor and may on its own account give rise to sparks when subject to friction with insulating materials. Therefore those who have the handling of gasoline in quantity, through nonmetallic hose pipes, are careful to lead any electricity generated to earth by means of a chain or wire. Serious explosions have occurred through neglect of this precaution. The use of gasoline for dry cleaning involves a risk which the utmost care cannot quite remove. A correspondent in the *Times* states that to do the job indoors amounts to criminal negligence. If done in the open, not only should the greatest care be taken to keep away from the lights (invisible gasoline will stream across the ground for yards and ignite from a flame at a surprising distance), but it should be assumed that there is always a slight chance that the gasoline will flare up spontaneously by electrical ignition. It is recommended that any fabric should be kept beneath the surface of the gasoline and that actual rubbing, as in washing a garment, is unnecessary and should be avoided. The better plan is to squeeze and stir the article about with a stout stick. Finally it may be cautiously wrung out by hand. In general it is best to keep the hands out of the gasoline. The gasoline should always be dried out of the article in the open air, never in the house.—*A. M. A. London Letter.*

RELATION OF SKIN DISEASES TO INTERNAL SECRETIONS

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The literature with reference to internal secretions in general is enormous. The task of selecting from this massive array the facts which bear upon dermatoses requires time and judgment.

It is soon discovered that the relationship between these internal secretions and diseases of the skin is less frequently direct than indirect, and therefore not usually apparent on the surface. This relationship, according to Gans, has been demonstrated by a series of clinical and pathological observations, but its specific significance in dermatology was elicited through the medium of experimental research from other aspects. An explanation of the relationship has been found in only a few pictures, while the significance of dysfunction of endocrine glands, whether of a single gland or several, is still largely obscure so far as cause and course of the dermatoses are concerned.

For a conception of the general pathology of endocrine disturbances, it must be understood that we are dealing only with symptoms or sydromes, the pathogenic foundation of which is still obscure. Oswald believes it best to consider the symptoms of endocrine disturbances as found in skin disorders rather than vice versa. He states that the coincidence of endocrine disturbance and the occurrence of skin lesions is not proof of a relation; the findings must be constant or there must be a good reason for them. Schalek feels that the endocrine glands undoubtedly play an important role in a number of skin conditions such as eczema, psoriasis, and lichen planus, but the relation between the endocrine glands and the pathological condition is so intricate that its correct interpolation is surrounded by difficulties. Oswald supported this view by stating that the endocrine system is variable in that the same disturbance in a gland will not always produce the same results. This is due to the interrelationship of the glands of the system; a dysfunction of one gland is not balanced by the other glands but rather causes dysfunction in them because of a lack of stimulation from the first gland. It is not a simple balance between the glands. For example, a hypofunction of the thyroid causes enlargement of the anterior lobe of the pituitary but the reverse is not true. If more than one gland is the seat of dysfunction the result will be the sum of individual symptoms and not a new group of special symptoms. In terms of dermatology the same is true, and we should look only for symptoms of dysfunction and not for a new symptom complex. A gland may have hypo- or hyper-function but may not have a perverted secretion without changing its histological structure. Ectocrine glands are unable to do this and neither are endocrine glands, as they have the same structure. Endocrine glands are very closely connected with the vegetative nervous system. Only a small stimulation is necessary to cause adrenalin to be secreted into the blood stream, and this stimulates the sympathetic nervous system much more than the primary stimulation. The sympathetic system is related to the central nervous system so that, indirectly, the endocrine glands influence this system, the one exception being the sexual glands. The central nervous system does not influence them. They are regulated or controlled by the pituitary, and it is influenced by the central nervous system. Thus the influence is very indirect.

In myxedema the skin is doughy and flabby but does not stay pitted from pressure. Folds of skin are produced as a result of wrinkling and fat deposit, and there is a certain roughness and dryness. Sweat secretion is stopped, and we may often find dermatitis or pyoderma, although the latter is not characteristic as it is secondary. The hair is dry, lustreless, and falls out, producing alopecia circumscripta. The hair may fall out everywhere except in pubic and axillary regions. If the condition occurs before puberty, these secondary sex characteristics are usually lacking. The nails are dry and friable. The chemical formula of the skin, its resorption, and reactions are different, and we find an increase in water in the subcutaneous layer. Urticaria, herpes, angioneurotic edema, eczema, and erythroderma are not typical but are secondary symptoms of thyroid afunction. Gans reported a case of urticaria of nine years duration which disappeared under thyroid medication, and Mumford reported a case of chronic urticaria with

thyroid deficiency that was relieved by thyroid therapy. Ravitch reported the same results in nine other cases. Schalek also reported a case of ichthyosis and hypothyroidism in an eighteen year old girl with a basal metabolism of minus eight who showed remarkable improvement under thyroid extract. Another case of exfoliative dermatitis in an eighteen year old boy with severe constitutional symptoms was given thyroid extract as a last resort and showed immediate and remarkable recovery. We may have any variation between normal and the picture seen in myxedema depending on the amount of dysfunction of the thyroid. At times only a few symptoms may be present, such as thinning of the hair, yellow or dry skin, or alopecia circumscripta. All of these deficiencies or symptoms may be restricted by treatment with thyroid, the difference between the congenital and adult types being that the latter require much smaller doses to obtain the same results. Skin symptoms are usually absent in the hyperplastic thyroid (large colloid goiter).

In hyperfunction of the thyroid we find a thin skin which is well vascularized. There is increased sweating of the hands, feet, and axillae, reflex blushing, urticaria, and sometimes purpura and eczema. Dermatographism is very marked and may go so far as to produce wheals. We may find areas of pigmentation or depigmentation and symptoms not unlike those of Raynaud's disease. Atrophy of the nails rarely occurs.

Disturbance of the parathyroid glands has not usually presented skin symptoms although the study regarding these glands has not been of any great extent. A few cases have been reported of herpes, pemphigus, urticaria, and tetany. In chronic tetany we may find nail changes, such as longitudinal and lateral grooves, and even paronychia. We may find hair loss and possibly calcium deposits in the skin.

The sex glands produce certain changes such as acne of puberty, seen especially premenstrually in the female, and growth of nevi.

Menstrual dermatoses include such changes as herpes premenstrualis, urticaria, erythema, and erysipeloid erythema.

Dysmenorrheal dermatoses include such conditions as dermatitis dysmenorrhea symmetrica, erythrocyanosis c r u r u m puellaria, chloasma dysmenorrhea, and even purpura and impetigo herpetiformis. Then there may be symptoms like Raynaud's disease. These symptoms seem to come from the resorption of the corpus luteum but a specificity or predisposition is necessary.

Dermatoses of pregnancy include urticaria, prurigo, pruritus, papular and vesicular hemorrhagic exanthemata, herpes gestatonis, impetigo herpetiformis, lichen simplex, and again symptoms resembling Raynaud's disease. There are also physiological changes in the skin, for example, pigmentation. Adult castration may bring about urticaria, eczema, vitiligo, and pruritus.

Menopause dermatoses include edema, erythema, alopecia, rosacea, and chloasma. There are multiple causes for these findings, and hypofunction of the ovaries is only a portion of the cause for the above symptoms. Hypertrichosis may be caused by an increase of the cortical function of the suprarenals, and it is hard to believe that we will find an increased function in older age. It is to be considered rather as a loss of control in the growth of hair of earlier life.

Hyperfunction of the anterior pituitary produces a condition known as acromegaly, in which we find a thickened skin, enlarged papillae, and ectasia of the glands of the skin. The fibrous tissue is increased and becomes hardened, and there is a hypertrichosis with thickening of the individual hairs.

Hypofunction of the anterior pituitary produces a dry skin, hyperpigmentation in later stages, and lack of sebaceous and sweat secretion. Loss of the secondary hair growth is seen which sometimes involves the eyebrows and eye lashes, although the head is usually intact. The condition known as infantilism presents a tender senile type of skin.

The above data indicates that most of the skin changes that are due to endocrine disturbances are those influencing hair growth, pigmentation, and secretion of glands and deposits of the products of metabolism. This fact must make us very careful in arriving at a conclusion of an endocrine disturbance as a cause of dermatoses.

The same skin changes may be found in diseases of different glands, and the cause is

thought to be due to a correlation between the glands.

We may find pigmentation in hyperthyroidism and acromegaly, which is undoubtedly due to hyperfunction of the suprarenals in correlation with the above glands. We have no anatomical proof because no medullary change has ever been found in the suprarenals. The medullary portion decreases in hypernephroma, and yet we have pigmentary changes present; thus an increased function of the medulla cannot cause hyperpigmentation. The above facts destroy the theory that hyperfunction of the suprarenals causes hyperpigmentation, and in cases of hyperpigmentation with pregnancy or menstrual changes, a disturbance of the suprarenals has not been proven. It would seem that in these cases the sex hormone itself produces or causes the pigmentation. We know very little about the relation between increased pigmentation and the sympathetic nervous system. We do know that hyperpigmentation may appear with normal suprarenals in isolated diseases of the abdominal sympathetic nervous system. All of which does nothing more than indicate that the nervous system plays a role in pigmentations. Pigment may vary with the sex hormone, there may be a pigmentation in myxedema. In Addison's disease it is probably due to increased function of the suprarenal cortex. Thus we find it in hypo- and hyperfunction. It is impossible to find a cause for the above instances and to show a relation, because possibly the gland changes may have nothing to do with the pigmentary changes.

Hypertrichosis with hyperfunction of the suprarenal cortex and anterior pituitary seems to present a certain connection because there is an increase in hair growth associated with increased function of the suprarenal cortex. This may be secondary and the influence of the sex hormone primary. Disturbances of the nervous system have been shown to cause hypertrichosis, as shown by being associated with hyperidrosis. We may have a symmetrical diffuse hair loss in hyperfunction of the thyroid and an asymmetrical alopecia is a more or less constant symptom of myxedema. In the former case the loss of hair is due to a hypersensitivity of the sympathetic and the parasympathetic nervous systems. This is shown by the fact that it is associated with hyperidrosis. In the latter case the cause of hair loss is malnutrition of the hair due to a decreased function in all organs (myxedema). Hypofunction of the pituitary and sex glands may cause loss of secondary sex hair (pubis, axillae, etc.). Dysfunction of the pituitary causes loss of eyebrows and eye lashes, diffuse alopecia of the body, and loss of secondary sex hair. In this case it is not due to the sex hormone. Alopecia may be caused by peripheral nerve injury. Other causes such as fright, sorrow, etc., show the connection with the nervous system.

Keratoses bear no relation to the endocrine system except possibly the acne keratoses.

Calcinosis is thought to be connected with the endocrine system but there is no definite proof.

Acne bears a definite relation to the genital sphere of both sexes, particularly at puberty, and is never found in persons without sex (castrates, eunuchs, etc.). The bursting of the follicle and the ripening of the corpus luteum are seen in time relation with exacerbations of acne. Acne consists first of a hyperkeratosis closing up the sebaceous ducts and secondly an immigration of micro-organisms. Hyperkeratosis is due to disturbance of the endocrine system; if there is no secondary factor then there is no acne. Acne is not necessarily due to a disturbance of the sex glands alone as we may have an atrophy of the ovaries and hyperfunction of the suprarenals, (puberty praecox) and still have acne. The same holds true of seborrhea which is seldom seen before puberty or after the menopause. Schalek states that the passive hyperemia of acne rosacea or vulgaris may be due to the increased secretory activity of the gonads.

Oswald states that it is hard to believe that toxic substances of sex glands, circulating in the blood, are the cause of menstrual dermatoses; he would rather believe that the sex hormone is normal and that the skin reacts abnormally to it. As an experiment: in a case of menstrual urticaria, blood which was taken from the patient during the menstrual period and reinjected after the period caused a return of the urticaria, as during menstruation. The same blood, injected into normal women, gave no reaction. The same phenomena has been demonstrated in cases of dermatitis during pregnancy. Explanation for this phenomena is

that the patient's skin was sensitive to normal sex hormone of menstruation, whereas, the other women's skins were not sensitive. Impetigo herpetiformis may be another example although it has been found to occur in tetany also, in which case it is probably due to the parathyroids, with pregnancy the cause of such a dysfunction. Oswald has reported cases of tetany in pregnancy without impetigo herpetiformis and thinks that the real cause lies elsewhere, probably in a predisposition. There is no question but that there is an endocrine factor present but a predisposition must figure in the picture. This predisposition does not leave the patient and will recur with succeeding pregnancies and is very likely to be more severe. Many skin changes are related to endocrine disturbances only by a time factor, (i.e. coincidence), and this relation at times is very striking. As an example: a case of urticaria was reported to have been cured by thyroidectomy. From the above cases we may conclude that disturbances of the endocrine system do not usually cause dermatoses per se but cause a predisposition of the skin to those diseases.

Pemphigus has been found in amenorrhea and dysmenorrhea and cases have been reported of recurring pemphigus with each pregnancy, clearing up after delivery. Four cases remained present until after the first menstrual period and then cleared up. Cases have been reported of pemphigus clearing up during menopause and also with destruction of the ovaries by means of the roentgen rays. In the male there seems to be no relation to endocrine disturbance.

There is much in the literature regarding psoriasis and opinions vary a great deal. There is probably a relationship to the sex glands, as psoriasis rarely occurs before puberty but frequently appears at puberty. There may be an aggravation of the disease with menstruation, and cases have been reported of psoriasis being cured during pregnancy, also in a case of a woman with hypoplasia of the genitals and an amenorrhea. In one case, which presented a disappearance of symptoms during pregnancy, blood which was removed during pregnancy and reinjected two months later, cleared the psoriatic lesions which had appeared. Of all endocrine disturbances only the ovaries seem to have any effect on psoriasis, and even this seems to be indirect by changing the predisposition. The basal metabolism is normal in most cases of psoriasis.

Oswald believes that there is no connection between ichthyosis or scleroderma and the endocrine system and states that melanoderma is often found with hypofunction of the ovaries but never with changes in the suprarenals.

In conclusion we may say that except in pigment and hair anomalies, keratoses, nail changes, and transient erythemas, there is no pathology of the skin to give a perfect explanation of its relation to endocrine disturbances. Even acne needs explanation for its genesis.

The hopes of dermatology regarding the relation of the endocrine system are not fulfilled. This does not mean that the endocrine system does not have any influence on dermatoses. Endocrine factors are complimentary and determining factors in the course of dermatoses, and the sympathetic and parasympathetic nervous systems are influenced by the endocrine glands. The essential determining factors lie outside of endocrinology, for example, allergic factors.

We must not give up the study of this relation, as very important things are still to be learned and unexpected things may arise in the course of such study.

Talcott Building

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5. Mumford: Lancet. Oct. 22, 1927.
6. Ravitch: Journ. Cutaneous Diseases. 25, 1907.

HER NEW JOB

A colored man injured in a motor accident died, and the insurance adjuster went to investigate.

"Did Washington P. Johnson live here?" he asked the weeping woman who opened the door.

"Yassah," she replied between sobs.

"I want to see the remains."

With a new sense of importance the dusky widow drew herself erect and answered proudly, "I'm de remains."

—*Wall Street Journal.*

A chemist says the first alcohol ever distilled was Arabian; which may explain those nights.—*Punch (London),*

Society Proceedings

COOK COUNTY

CHICAGO MEDICAL SOCIETY

Regular Meeting, Wednesday, March 1, 1933

Surgical Treatment of Tuberculosis..Carl A. Hedblom
Evaluation of the Surgical Risk.....R. W. McNealy
Deferred Operation in the Treatment of Periappendicular Abscess .....Karl Meyer
Discussion.....{Ralph Bettman, Benjamin Goldberg, N. M. Percy, William Cubbins

Meeting, Wednesday, March 15, 1933

Program Sponsored by University of Illinois College of Medicine
The Management of the Eclamptogenic Toxemia .....F. H. Falls
The Use of Anterior Pituitary Prohormone in Menstrual Disorders .....W. H. Browne
The Use of Vehicles for Medicine. (With demonstration.) .....Bernard Fantus
Hypothyroidism and Cretinism in Children—Consideration of Some Special Problems .....I. P. Bronstein

General Practitioners' Night, March 22, 1933

RHEUMATISM

The Etiology and Pathology of Acute Rheumatic Fever.....Benjamin J. Clawson, Jr., Minneapolis
Physical Therapy in Chronic Arthritis..John S. Coulter
Classifications and Etiology of Chronic Arthritis .....Emil G. Vrtiak
Discussion.....{Ernest E. Irons, Disraeli Kobak

GREENE COUNTY

Regular Meeting Greene County Medical Society was held in Carrollton, Illinois, Friday, March 10, 1933.

After a splendid chicken dinner the Society was called to order by the president, Dr. O. J. Gause, at 7:30 P. M. in the dining room of Hotel Lindsey.

Dr. W. H. Newcomb of Jacksonville read a paper on "Pulmonary Tuberculosis" which was illustrated by lantern slides, and was very instructive to the general practitioner. It evoked interesting discussion. Following the paper Dr. Newcomb showed a number of x-ray plates of the chest illustrating various types of tuberculosis as well as chest tumors.

The business session followed: Minutes of last meeting were read and approved. Correspondence from the State Society read and Dr. Wm. H. Garrison was chosen to represent the Greene County Society on advisory committee on medical economics of State Society. Moved by Dr. W. H. Garrison, seconded by Dr. O. L. Edwards that Dr. N. J. Bucklin, Dr. E. E. Jouett, and Dr. C. O. Bulger be appointed as a committee to arrange a clinic for Crippled Children. Motion carried.

Meeting adjourned at 10:00 P. M.

Wm. H. Garrison,
Sec'y.

VERMILION COUNTY

The Vermilion County Medical Society held their regular monthly business meeting at the Plaza Hotel Tuesday evening at six thirty o'clock. The dinner was served to about sixty members. Table decorations were furnished by Smither Brothers, Florists. Cigars and cigarettes were furnished by the Woodbury, Carson and Plaster Drug stores.

The Past President, Dr. Leo V. Fairhall who has been through a long siege of illness was given a grand ovation as he appeared at the speakers' table.

The committee consisting of Dr. E. C. McGavran of Sidell, Dr. S. M. Hubbard of Ridgefarm and Drs. J. G. Fisher, O. H. Crist and H. S. Babcock of Danville was appointed with power to act concerning some differences between the physicians and the township supervisors over medical attention to the indigent poor.

The physicians are making special arrangements to immunize school children against diphtheria. This is in accordance with a campaign undertaken by the new State Commissioner of Health, Dr. Jirka. The committee appointed to take care of this is Drs. A. J. Fletcher, O. H. Crist and F. M. Hartsook.

A motion carried to instruct our delegate to the State Convention to invite the State Medical Society to hold its 1934 meeting in Danville.

Miss Campbell, from the State Department for Care of the Blind, told of the hard time the "Silver Nitrate" bill was having in the State Senate. This bill is to compel the installation of an antiseptic in the eyes of the new born to prevent infection which causes so much blindness in infants. The doctores signed a petition to our State Senator Wilbur H. Hickman urging its passage.

Dr. Geo. Potter presented an interesting clinic consisting of a set of quadruplets he had delivered. They were three boys and a girl of about five months.

Dr. Herman L. Kretschmer, Professor of Genito-Urinary Surgery of Rush Medical College, Chicago, was introduced by Dr. J. L. Funkhouser as the speaker of the evening. Dr. Kretschmer spoke on "The New Method of Treating Prostatic Obstruction." He was a fluent speaker, a clear thinker, backing his statements by many lantern slides and data from case histories.

There were about sixty-five members and guests present for the lecture, many of them from adjoining counties and Indiana.

Respectfully submitted,
C. T. Cass, *President*,
Holland Williamson, *Secretary*.

Marriages

PETER P. DOERING to Miss Marjorie Dorothy Sandquist, both of Geneseo, Ill., February 10.

NOBLE MURRAY EBERHART, Chicago, to Mrs. Florence Ingram of Westmont, Ill., February 7.

EUGENE FALSTEIN to Miss Charlotte Rosenfield, both of Chicago, Dec. 25, 1932.

TADEUSZ MARYAN LARKOWSKI to Florentina Malachowski, D.D.S., both of Chicago, January 25.

GRANT E. ROYCE, Harvard, Ill., to Miss Charlotte Wakeley, January 11.

OLIVER E. VAN ALYEA, Chicago, to Miss Elizabeth Cameron of Milwaukee, February 11.

GEORGE W. WALBRIGHT, Metropolis, Ill., to Miss Dora E. Thacker of Danville, Dec. 25. 1932.

Personals

Dr. H. Kelekian presented a paper before the Seminar at St. Bernard's Hospital, Tuesday, March 14, 1933, at 9:00 P. M. His subject was "Clinical Diagnosis in Orthopedic Surgery," with case demonstration.

Dr. Budd C. Corbus spoke before the Peoria City Medical Society, in Peoria, Tuesday, March 21, and before the Will-Grundy Medical Society in Joliet, Wednesday, March 29. The title of his talk was "Transurethral Resection of Bladder Neck Obstructions"—a Motion Picture Presentation.

Dr. Joseph L. Baer addressed the Southern Interurban Gynecological and Obstetrical Society in Memphis, Tenn., on the subject of "The Third Stage of Labor" on February 13, and addressed the Mid-south Post Graduate Medical Assembly in Memphis, Tenn., on the subject of "The Cervix Uteri in Obstetrics and Gynecology" on February 14.

Dr. Bertha Van Hoosen was to have addressed the Ogden Park Woman's Club on March 15.

Dr. J. F. Jaros gave a talk on "Health and Personality" before the Kiwanis Club of Austin on March 16.

Dr. John S. Coulter gave a lecture on "Physical-Therapy" at the March 17th meeting of the Pre-Medical Pre-Dental Club of Y. M. C. A. College.

Dr. Joseph K. Calvin addressed the Park Manor Parent Teacher Association on March 17.

Dr. Arno B. Luckhardt gave a talk on "How Medical Science Protects the Child" at the March 20th meeting of the Mothers' Study Club of the O'Keefe School, Chicago.

Dr. John R. Harger addressed Will-Grundy County Medical Society on March 15. His subject was "Abdominal Pain."

Dr. Edward A. Oliver addressed the Lake County Medical Society on Tuesday, March 14, at Waukegan. His subject was "The Commoner Diseases of the Skin and Diagnosis and Treatment."

Dr. Don C. Sutton addressed the Aurora Medical Society on March 2, subject, "Treatment of Pneumonia." He also addressed the Coles-Cumberland County Medical Society on March 8, subject, "Arteriosclerosis."

The Educational Committee has been invited to arrange a series of lectures for the students of Morton Junior College, Chicago. The first lecture was given Wednesday night, March 22, when Dr. A. C. Ivy spoke on "Experimentation, the Method of Progress."

Dr. Meyer Solomon gave a talk on mental health at the March 22nd meeting of the Mothers of the Mayfair School, Chicago. He gave the third lecture in a series on "Mental Hygiene" before the Brainard Woman's Club on March 21, and addressed the Psychology Club of the Chicago Junior College the evening of March 22.

Dr. R. H. Jaffe gave a paper on "Carcinoma of the Lung" before the Will-Grundy County Medical Society at Joliet, March 22.

Dr. Arno B. Luckhardt addressed the Mothers' Study Club of the O'Keefe School, Chi-

cago, March 20, his subject, "How Medical Science Protects the Child."

Dr. Cyril L. Hale addressed the Woman's Club at Pontiac, Illinois, on March 21.

Dr. Josephine Young gave a talk on "Mental Hygiene" before the Chesterfield Woman's Club of Chicago on March 21.

Dr. Alex. A. Hershfield addressed the Woman's Auxiliary of the Aux Plaines Branch on March 24.

Dr. E. L. Cornell addressed the Alexander County Medical Society on March 24. He also showed the moving picture film, "Physiology and Conduct of Normal Labor."

Health Week will be observed in Illinois April 23-29. The Educational Committee has already received requests for speakers during the week from fifteen high schools and clubs in Whiteside County.

Dr. Eric Oldberg addressed the Kankakee Hospital Staff and the Kankakee County Medical Society on March 16, on Epilepsy.

March 22, Dr. Helen Kostka spoke over station WGN under the auspices of the Chicago Tuberculosis Institute. Her topic was "The Nursing and Social Side of Tuberculosis Prevention."

Dr. Oscar B. Nugent's motion picture of Primitive India has been in great demand since his return last year. He has lectured and shown his pictures this month as follows:

March 4, Oak Park Council

March 5, Woodlawn Park Church

March 8, Founders' Night, Riverside, Ill.

March 16, Belmont Hospital Staff Meeting

March 24, Arnold Memorial Church

March 25, Medinah Athletic Club to the Carson Pirie Scott City and Suburban Salesmen Association.

He showed motion pictures on the Holy Land as follows:

March 17, Convent of the Lady of the Cenacle

March 26, First Methodist Church of Austin.

Officers of the Chicago Orthopedic Club for the ensuing year are Drs. Robert O. Ritter, president; Jacob K. Meyers, vice president, and Daniel H. Levinthal, secretary.

Dr. Oliver S. Ormsby has been elected president of the Chicago Dermatological Society; Dr. James H. Mitchell, vice president, and Dr. Max S. Wien, secretary.

Dr. Andrew J. Toman has been appointed director of the House of Correction and Police Emergency Hospital, succeeding Dr. Frank J. Jirka, who is now state health officer.

Dr. Frances R. Vanzant, Rochester, Minn., addressed the Chicago Council of Medical Women, March 13, among others, on "Interpretation of Gastric Analysis (Norms of Men and Women)."

Dr. Charles G. Mixter, Boston, delivered the ninth Lewis Linn McArthur Lecture of the Frank Billings Foundation of the Institute of Medicine of Chicago, March 24. His subject was "Meckel's Diverticulum and Its Surgical Significance."

One section of the library of Michael Reese Hospital has been dedicated as a memorial to Dr. Heliodor Schiller, former member of the staff, who died Oct. 20, 1932. Volumes on surgery from Dr. Schiller's library form the nucleus of the section known as the "Schiller Memorial Bookshelf." A bronze plaque has been placed over the section. Contributions from staff members, friends, relatives and patients will provide a fund, the income from which will be used for the purchase of additional books on surgery.

Dr. James Bryan Herrick was one of thirteen elected to honorary membership, March 2, in the New York Academy of Medicine. They were chosen, it was stated, in recognition of "their outstanding contributions to medicine."

Ten of the new honorary members of the academy are foreigners. The other Americans are George Richards Minot, professor of medicine at Harvard university, and William Gibson Spiller, professor of neurology at the University of Pennsylvania.

Dr. Max Thorek addressed and gave a motion picture demonstration to the staff of the West Lake Hospital on March 7 on "The Surgical Treatment of Difficulties of Swallowing."

News Notes

—H. 433 proposes, in effect, that employees contracting any occupational disease in any employment be entitled to compensation.

—S. 296 proposes to levy an annual tax on physicians, amounting to 1.5 per cent of the difference between gross receipts from practice and $1,200.

—H. 325 proposes to eliminate those provisions in the medical practice act authorizing the licensing of midwives. H. 326 proposes to require both parties to proposed marriages to present certificates from licensed physicians that they are free from venereal disease.

—The establishment of a comprehensive clinic for the treatment of epidemic encephalitis at the Dixon State Hospital has been announced. Dr. Charles C. Rowley will be the resident physician in charge. A small group of children from 6 to 16 years of age will be given special attention. Dixon State Hospital is the only institution in the state where patients with post-encephalitis can be legally committed.

—The establishment of a public health council in De Witt County has been announced as the outgrowth of a diphtheria prevention campaign sponsored about a year ago by the De Witt County Medical Society. Membership is open to physicians who are members of the county medical society, officials of the schools, and two representatives of any other organization in the county interested and willing to participate in the activities and purpose of the council. A broad public health program will be carried on through committees.

—A transformer delivering 1,200,000 volts and a giant x-ray tube with a capacity of from 800 to 1,000 kilovolts are being installed at Mercy Hospital. The special building contains three floors, the first of which houses a 300 kilovolt transformer; and the second, a control room and a radium treatment room, and lead-enclosed cubicles. The treatment room for the high voltage roentgen rays is 10 feet long, 5 feet wide and 8 feet high. The tube will be activated by 10 to 30 milliamperes, so that the duration of treatment will be reduced to a fraction of the time formerly required. The radiation therapy department will be under the direction of Dr. Henry Schmitz.

—Under a plan worked out by the Chicago Tuberculosis Institute and Superintendent of Schools William J. Bogan, the tuberculin testing of school children in Chicago was begun recently. The test is performed only on children who present a signed statement from their parents authorizing it. The Pirquet skin test is given; roentgenograms will be made of positive reactors and records kept of all cases. When conditions are found which require observation or treatment parents will be notified and asked that the pupil be placed under the care of a physician. Case records will be available for the information of family physicians. The work was begun in the Lake View High School, and it is expected to continue it in other schools.

—A division for the treatment of private patients with contagious diseases has been opened at the Albert Merritt Billings Hospital, University of Chicago Clinics. Ten private rooms in the Billings Hospital are now available for this service, the number to be increased should the demand warrant it. The division is the only one of its kind in the city since the recent closing of the Durand Hospital. While the Chicago municipal contagious disease hospital and the Cook County Hospital accept indigent patients with contagious diseases, the Durand Hospital, a part of the McCormick Institute for Infectious Diseases, had been the only hospital where private patients with contagious diseases could be isolated. Directors of the institute were forced to close the Durand Hospital because of reduction in income.

—The Cameron Prize for 1933 has been awarded jointly to Drs. George F. Dick, professor of medicine and chairman of the department of medicine, Division of Biological Sciences, University of Chicago, and Gladys H. Dick of the John McCormick Institute for Infectious Diseases, in recognition of their work on the etiology and treatment of scarlatina. This award is made annually by the University of Edinburgh, Scotland, on the recommendation of its faculty of medicine. The prize amounts to about $685 (at the present rate of exchange) and is given annually "to a person who, in the course of the five years immediately preceding, has made any highly important and valuable addition to practical therapeutics." Other Americans who have been given the award in-

clude Dr. Harvey Cushing, 1924, and Dr. George R. Minot and Dr. William P. Murphy, Boston, 1930.

—Complete provisional statistics for 1932 give Illinois the lowest birth and death rates of record in the state, according to the state health department. There were 83,183 deaths and 111,523 births reported, giving rates per thousand estimated population of 10.7 and 14.4 respectively. The number of births in 1932 was 7,265 short of the 1931 figure and 29,914 below the 1924 record, the year of highest birth registration. New low death rates were recorded for measles with a rate of 0.7 per hundred thousand; diphtheria, 3.1; tuberculosis, 55; infant mortality, with a rate of 52 per thousand live births reported. Increases were noted in the death rates for heart disease, with 235 deaths per hundred thousand of population against a previous high of 221.5; cancer, 116 against 112.6, and diabetes, 26.7 against 25.7. Automobile accidents resulted in 2,104 deaths, giving a rate of 27.1 per hundred thousand as compared with 2,333 deaths and a rate of 28.7 in 1931.

—The Mid-Western Section of the American Congress of Physical Therapy will conduct a one day scientific program on Monday, May 15, at the Hotel Jefferson, Peoria, Illinois. This immediately precedes the annual meeting of the Illinois State Medical Society which commences on May 16. A splendid program has been arranged. The medical profession is cordially invited. There will be no registration fee.

—Donald A. Laird, director of the psychological laboratory of Colgate University, has been appointed to supervise the exhibit on sleep and fatigue for the Century of Progress Exposition, opening at Chicago in June. The exhibit, which is being supported by the Master Bedding Makers of America, will feature the actual use of apparatus used on recent studies of sleep and fatigue at several universities, giving visitors an opportunity to take some of the tests. It is expected to accumulate in this way a mass of data bearing on the diurnal course of fatigue.

Deaths

EMMA SCRIBNER MACKAY APPEL, Chicago; Northwestern University Woman's Medical School, Chicago, 1901; a Fellow, A.M.A.; for fifteen years medical examiner of the vocational guidance bureau of the board of education; aged 57; died, March 4, in the Women's and Children's Hospital, of cirrhosis of the liver.

ALEXANDER LEON BROWN, Chicago; University of Illinois College of Medicine, Chicago, 1930; aged 26; died, February 22, of acute cholecystitis with stones in the common duct and postoperative intestinal obstruction.

MICHAEL HENRY CLEARY, Galena, Ill.; Pulte Medical College, Homeopathic, Cincinnati, 1878; also a lawyer; formerly member of the state legislature; member of the board of education; aged 79; died, February 2, of carcinoma of the stomach.

FRANK EMMETT GEARON, Chicago; University of Illinois College of Medicine, Chicago, 1909; a Fellow, A.M.A.; on the staff of St. Anne's Hospital; aged 52; died, Dec. 23, 1932, of myocarditis and nephritis.

LUCIEN WINSLOW GORDON, Equality, Ill.; Miami Medical College, Cincinnati, 1880; aged 74; died, January 8, of paralysis agitans and capillary bronchitis.

DUNCAN BROWN MCEACHERN, Chicago; Jenner Medical College, Chicago, 1906; a Fellow A.M.A.; College of Physicians and Surgeons of Chicago, School of Medicine of the University of Illinois, 1907; on the staff of the South Shore Hospital; aged 56. died, February 6, of heart disease.

JAMES PALMER MCGILL, Chicago; Homeopathic Hospital College, Cleveland, 1884; aged 76; died, February 9, of pneumonia.

JOHN N. QUILLIN, Villa Grove, Ill.; College of Physicians and Surgeons, Keokuk, Iowa, 1884; aged 81; died, January 7, in Mount Vernon, Ohio, of cerebral hemorrhage.

JOHN S. SENNOTT, Waterloo, Ill.; St. Louis Medical College, 1883; member of the Illinois State Medical Society; aged 71; died, January 3, of bronchopneumonia.

JOSEPH SHERLAW, Chicago; Long Island College Hospital, Brooklyn, 1895; member of the Illinois State Medical Society; aged 72; died, February 13, of cerebral hemorrhage.

CHRISTOPHER MAY THORNTON, Royalton, Ill.; Louisville (Ky.) Medical College, 1876; member of the Illinois State Medical Society; aged 82; died, February 9, as the result of a fall.

JOHN WESLEY TURNER, Catlin, Ill.; Willamette University Medical Department, Salem, 1872; aged 93; died, Dec. 18, 1932, of basal cell carcinoma.

JAMES ROBERT WATSON, Danville, Ill.; Rush Medical College, Chicago, 1889; aged 69; died, Dec. 29, 1932, in the Lakeview Hospital, of cerebral hemorrhage.

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